CHAPTER 5

QUALITY ASSURANCE/ANALYSIS

Chapter Objective: *Upon completion of this chapter, you will have the knowledge to recognize the purpose of the Naval Aviation Maintenance Discrepancy Reporting Program (NAMDRP), identify the reports covered by the NAMDRP, recognize the responsibilities of the Data Analyst, and identify the important role that analysis plays in support of the Naval Aviation Maintenance Program (NAMP). You will also be able to identify the source documents used in the Maintenance Data System (MDS), and recognize the key reports generated by the MDS.*

The quality assurance/analysis (QA/A) division is staffed with a relatively small group of highly skilled personnel. These permanently assigned personnel under the QA/A officer are responsible for conducting and managing the QA/A effort of the department. The maintenance personnel assigned to QA/A are known as quality assurance representatives (QARs). To obtain more efficient use of information collected by the Maintenance Data System (MDS), and to increase the scope of QA/A, a qualified data analyst is assigned. The primary duty of the data analyst is to perform all MDS functions of QA/A. The data analyst will not be assigned the duties of technical publications librarian or QAR. It is also the responsibility of QA/A personnel to maintain the central technical publications library, which was previously discussed in chapter 3 of this TRAMAN.

NAVAL AVIATION MAINTENANCE DISCREPANCY REPORTING PROGRAM (NAMDRP)

This program is the method by which hazardous deficiencies in material and publications, substandard workmanship, and improper quality assurance (QA) procedures are reported,

As an AZ3 or AZ2 you should know the purpose of each of the discrepancy reports; be able to review them for completeness, correct phraseology, part number identification, and nomenclature; and furnish information from the aircraft logbook for their preparation. Chapter 6 of this TRAMAN provides information as to what is recorded in the various sections of the aircraft logbook. If you are the AZ who is responsible for the preparation of discrepancy reports, you should be familiar with the preparation and maintenance of the aircraft logbook as well as the preparation of NAMDRP reports.

The reports described in this section provide a method for reporting safety situations and quality deficiencies that require special attention and/or prompt corrective action. The QA/A division is responsible for managing the NAMDRP. QA/A will assist the work centers in determining if one or more reports are needed for any maintenance problem or situation occurring in the activity and review all reports to ensure they are accurate, clear, concise and comprehensive. The QA officer should review all of the reports listed below:

- Hazardous Material Report (HMR). This report provides a standard system for reporting material deficiencies. These deficiencies, if not corrected, could result in death or injury to personnel, or damage to or loss of aircraft, equipment, or facilities.

- Explosive Mishap Report (EMR). This report provides a standard system for reporting explosive incidents, malfunctions, and dangerous defects (referred to as explosive mishaps)

involving explosive systems (ordnance and cartridge-actuated devices), launch devices (devices used to launch or fire explosive systems), and armament weapons support equipment (AWSE). An explosive mishap is defined as any condition involving explosive systems, launch devices, or AWSE. These conditions, if not corrected, could result in death or injury to personnel, or damage to or loss of aircraft, equipment or facilities.

- Engineering Investigation (EI). EIs provide an investigation process that determines the cause of fleet-reported, equipment/material failures. It is a material analysis inspection or an engineering assistance investigation.

- Quality Deficiency Report (QDR). This report provides maintenance activities with a method for reporting deficiencies in new material or newly reworked material.

- Aircraft Discrepancy Report (ADR). This report provides a direct method for reporting discrepancies in quality assurance procedures to naval aviation depots (NAVAVNDEPOTs) and civilian contractors performing maintenance on aircraft.

- Technical Publication Deficiency Report (TPDR). This report provides a simplified procedure for reporting technical publication safety hazards and routine deficiencies.

Safety is the primary consideration for reports discussed in this section. If a report being submitted meets the criteria for an HMR/EMR and warrants an EI request or category (CAT) I QDR, it should be transmitted as a dual message report; for example, EMR/EI request. All HMRs, EMRs, EI request, and QDRs are submitted to the cognizant field activity (CFA). All supplemental data submitted in conjunction with this program will identify the original submitting activity's report serial number and message date-time group. Copies of reports are retained for 1 year.

A NAMDRP message report is prepared and submitted only under one or more of the following six conditions:

1. When an explosive/accident/incident/malfunction is involved.
2. When the existence of a known condition which, if not corrected, will or could result in death or injury to pilot, crew, maintenance personnel, or other persons or loss of aircraft. This report is to be made by priority message within 24 hours of discovery.
3. When an urgent change is required to safety or loading or handling instructions to prevent a hazardous condition from occurring.
4. When urgent action or assistance is required or requested.
5. When a condition is detected that allows, due to the design of a part or component, incorrect installation. This condition can be or has been easily accomplished, and system malfunction or failure was the result (Murphy's Law).
6. When damage to an aircraft occurs due to failure of support equipment (SE).

CFA response to an EMR, HMR, and all combined reports, such as HMR/EI, must be provided to the requesting activity within 72 hours of their receipt of the request; within 5 working days after receipt of a routine EI request, CAT I QDR, or CAT I TPDR; within 10 working days after receipt of a CAT II QDR; as soon as possible, but not later than 45 days after receipt of an ADR (30 days in the case of aircraft reworked at a NAVAVNDEPOT); and within 30 days after receipt of a CAT II TPDR.

PREPARATION OF NAMDRP MESSAGE REPORTS

As an AZ you may be required to submit a NAMDRP report in the course of your duties. Most often, however, you will be required to type a smooth report prepared in a rough form by another person attached to the maintenance activity.

The following content and format applies to the HMR, EMR, EI request, and CAT I QDR message reports. You should note that the spaces on these reports are numbered consecutively from 1 to 22. The basic data for each space is shown below. Detailed procedures for preparation, security classification, and forwarding of completed NAMDRP message reports are contained in the latest edition of OPNAVINST 4790.2.

1. Reporting custodian/unit identification code (UIC).
2. Cognizant field activity (CFA) for failed item. Enter the aircraft CFA when reporting common/general material not installed on, or peculiar to, specific aircraft.

3. Report control number (RCN). Report control numbers begin with 0001 at the beginning of each calendar year and progress consecutively throughout the year. Permanent detachments (detachments with OINCs, for example, LAMPS, HC) will assign report control numbers independently of the parent activity.

4. Julian date deficiency discovered/location of reporting unit. Omit location if entry will cause message to become classified.

5. National stock number. The correct national stock number, including all prefixes and suffixes of the item being reported, is entered in this space. This may require the use of catalogs and various manuals.

6. Nomenclature. The noun name of the item being reported is entered here. If necessary, reference should be made to the IPB for correct terminology.

7, For new material, indicate manufacturer's name and code and the shipper's name; for reworked material, the last rework facility.

8. Manufacturer's part number. The manufacturer's part number of the failed item is entered in this space. This information is normally found on the nameplate attached to the part. If not on the nameplate, refer to the SRC card, or to the latest applicable IPB.

9. Serial/lot/batch number. The serial/lot/batch number of the item being reported is entered in this space. This is usually found on the nameplate of the part or on the shipping container of lots and batches.

10. Contract/purchase order/document number (on shipments from government service administration facilities, include contract, purchase order, and requisition number). The contract number can normally be found on the item nameplate, SRC card, or shipping container, if available. The contract number is essential information for material replacement or cost adjustment under the warranty clause in government contracts.

11. New/reworked/overhauled, if known. This item relates to item 6.

12. Date manufactured/reworked (if applicable). This information may be obtained from decals, stamps, logbooks, or SRC cards.

13. Operating time at failure. Based on entry item 12, indicate the time material had been in service since new or rework when the deficiency was discovered. See item 12 for possible sources of information.

14. Government furnished material. (Yes or no, if QDR; N/A if not). This is material or equipment that has been furnished by the government to a contractor or government activity for installation in, use with, or in support of the aeronautical system during production, conversion, or modification.

15. Quantity. Quantity is a count of each individual unit of issue (QDR only, N/A if not). (A) received, (B) inspected, (C) deficient, (D) items in stock at activity.

16. Deficient item works on or with. In order of importance, enter (A) end item (B) next higher assembly.

17. Dollar value of deficient items (if known, otherwise UNK) and man-hours to repair.

18. N/A

19. Item under warranty. Enter yes, no, or UNK as applicable.

20. Work unit code. Enter the work unit code as listed in block A22 of the VIDS/MAF,

21. Action/disposition. If holding for investigation, indicate holding activity, location, and time to be held at the activity; for example, holding exhibit 30 days for investigation at Building 4, Naval Supply Depot, Norfolk. If the exhibit is a cartridge-actuated device or an aircrew escape propulsion system (CADS/AEPS) item, provide the name of the holding station/ship ordnance department and the locally assigned turn-in document number. If no response is required, specify CFA response not required.

22. Details. The details should be entered as follows:

a. Narrative description of abnormal function, known or probable causes, pertinent TDs not incorporated, comments or recommendations, and EI (if requested). Photographs to follow (if applicable).

b. How safety of personnel or activity mission is affected.

c. Number of similar deficiencies in like items reported by the originating activity; for example, 5 in the past 4 months.

d. How deficiency was detected or confirmed; for example, visually or functional operation. Where deficiency was discovered; for example, maintenance/in flight.

e. Storage/handling information, if applicable.

f. Indicate if supporting documents will be supplied. When photographs are taken, place a ruler alongside the object so it will appear in each photograph. Measurements should also appear on sketches.

g. Description of incorrectly identified new material, if applicable.

h. If you are preparing an EMR, the list of items required in this section are too numerous to mention here. Refer to the latest edition of OPNAVINST 4790.2.

i. The name, title, and AUTOVON number of the knowledgeable person to contact (if deployed, so indicate).

j. Aircraft model and bureau number (if not already included).

k. Aircraft engine, auxiliary power unit (APU), or support equipment gas turbine engine, model and serial number, time since new, time since overhaul, last overhaul activity, and number of overhauls (if applicable and not already included).

HAZARDOUS MATERIAL REPORT (HMR)

This report provides a standard method for reporting material deficiencies, which, if not corrected, could result in death or injury to personnel, or damage to or loss of aircraft, equipment, or facilities. An HMR priority precedence message (fig. 5-1) is submitted within 24 hours of discovery of one or more of the following conditions:

1. When a malfunction or failure of a component part that, if not corrected, could result in death or injury to personnel, or damage to or loss of aircraft, equipment or facilities.

FROM: NAS GREEN COVE SPRINGS FL
TO: NAVWPNCEN CHINA LAKE CA
AIG FOUR TWO THREE
INFO: COMASWWINGPAC SAN DIEGO CA
USS GOLDWATER
UNCLAS //N04790//
SUBJ: HAZARDOUS MATERIAL REPORT
MSGID/GENADMIN/AIMD//
REF/A/DOC/OPNAV/01JAN89//
AMPN/OPNAVINST 4790.2E//
RMKS/1. NAS GREEN COVE SPRINGS/00123
2. NAVWPNCEN CHINA LAKE CA
3. N00123-88-0003
4. 8239/GREEN COVE SPRINGS
5. 2RH 1670-00-127-5598
6. NES-12H PARACHUTE ASSEMBLY
7. N/A
8. 107AS 106-1
9. SERIAL NO. 211257
10. N/A
11. N/A
12. REPACKED 8016
13. 223 DAYS
14. N/A
15. N/A
16. S-3A
17. N/A
18 N/A
19. N/A
20 91A20
21. REPACKED IAW NA 13-1-6.2 AND RETURNED TO SERVICE.
22. A. SUBJ PARACHUTE LAST PACKED ON BOARD CV 58 INDUCTED FOR 224 DAY INSPECTION AT AIMD GREEN COVE SPRINGS. INSPECTION REVEALED FOLLOWING DISCREPANCY: LOWER PACK OPENING BANDS ROUTED OVER EPC LANYARD VICE UNDER.
B. THIS CONDITION COULD HAVE SERIOUSLY IMPEDED PROPER OPERATION OF PARACHUTE DURING EJECTION.
C. ZERO
D. VISUAL INSPECTION/MAINTENANCE
E. N/A
F. PHOTO AVAILABLE ON REQUEST
G. N/A
H. N/A
I. REDMOND PRC, AUTOVON 951-7650
J. THROUGH L. N/A//

Figure 5-1.-Sample Hazardous Material Report (HMR).

2. When urgent or when assistance is required and corrective action must be completed at an early date because of operational commitments.

3. When a condition is detected that could cause incorrect installation and subsequent system malfunction due to the design of a part.

4. A potential or experienced in-flight or on-the-ground loss of aircraft parts in which maintenance/material factors are involved. The terminology "Things Falling Off Aircraft (TFOA)" is used when referring to such incidents. TFOA includes incidents such as a FODed engine which sheds parts.

EXPLOSIVE MISHAP REPORT (EMR)

This report provides a standard method for reporting explosive incidents, malfunctions, and dangerous defects, which, if not corrected, could result in death or injury to personnel, or damage to or loss of aircraft, equipment or facilities, An EMR priority precedence message (fig. 5-2) is submitted within 24 hours of discovery under one or more of the following conditions:

1. When a malfunction or failure of an explosive system, launch device, or AWSE is detected, which, if not corrected, could result in death or injury to personnel, or damage to or loss

FROM: FITRON SEVEN ONE
TO: COMPACMISTESTCEN PT MUGU CA
AIG FOUR TWO THREE
AIG SEVEN SIX TWO ZERO
INFO: COMTACWINGSLANT OCEANA VA
COMCARAIRWING EIGHT
USS FRANKLIN
UNCLAS //N04790//
SUBJ: EXPLOSIVE MISHAP REPORT
MSGID/GENADMIN/VF-71 QA//
REF/A/DOC/OPNAV/01JAN89//
REF/B/DOC/OPNAV/03MAR89//
NARR/REF A IS OPNAVINST 4790.2E, REF B IS OPNAVINST 5102.1C//
RMKS/1. VF-71/34567
2. PACMISTESTCEN PT MUGU CA
3. R34567-88-0040
4. 7365/DEPLOYED
5. 8E 1410-01-056-9405
6. AIM-9L TACTICAL GUIDED MISSILE
7. 49956
8. N/A
9. SER. NO. KRE-0235
10. UNK
11. REWORKED
12. 20 APRIL 86
13. 137.9 HRS
14. N/A
15. N/A
16. F-14A
17. 58,000/UNK
18. N/A
19. UNK
20. 75M12
21. HOLDING 30 DAYS AT WEAPONS DEPT USS FRANKLIN (CV-58).
22. A. ARMING DEVICE WILL NOT STAY IN ARMED POSITION, GOES TO SAFE IN FLIGHT.
B. POSSIBLE LOSS OF MISSION CAPABILITY.
C. TWO IN LAST SIX MONTHS.
D. VISUAL ON AIRCRAFT RECOVERY.
E. THROUGH G. N/A
H. (1) NONE
(2) VISIBILITY 5 MILES AND SCATTERED/WIND 9 KNOTS/TEMP 76 DEG F.
(3) AIM-9L TACTICAL GUIDED MISSILE/SER.NO. KRE-0235/DODIC PA72/8E 1410-01-056-9405.
(4) LAU-7/A-5 SER. NO.0032/AIRCRAFT STA. 1A.
(5) N/A
(6) 52
(7) SAFE/ARM SWITCH OF ARMING DEVICE WILL NOT STAY IN ARMED POSITION WHILE IN FLIGHT.
(8) THROUGH (15). N/A
(16) AIM-9L LOADED ON AIRCRAFT STA. 1A AND 8A.
I. AOC B.B. STACKER/ARMAMENT BRANCH CPO/DEPLOYED
J. F-14A/161162
K. AND L. N/A//

Figure 5-2.-Sample Explosive Mishap Report (EMR).

of aircraft, equipment or facilities. Any explosive mishap involving aircrew error must be reported using the latest edition of OPNAVINST 3750.6 or OPNAVINST 5102.1.

2. When a malfunction or failure of an explosive system is found to be caused by failed material. This report is a combined EMR/QDR or EMR/EI as appropriate.

3. When urgent action or assistance is required to correct a deficiency at an early date because of an operational commitment.

4. When an urgent change to ordnance loading or launch device/AWSE safety instructions is required to prevent a hazardous condition from occurring.

5. When a condition is detected that could cause incorrect installation and subsequent system malfunction due to the design of a part.

ENGINEERING INVESTIGATION (EI)

The EI comprises three types of investigation: disassembly and inspection, material analysis, and engineering assistance. Only the disassembly and inspection procedures will be discussed in this section since the procedures for requesting any of the three types of investigation are the same.

Engineering investigations (fig. 5-3) are requested by a routine precedence message within 5 working days after discovery of the deficiency, unless combined with an HMR/EI, under one or more of the following conditions:

1. When safety is involved. This includes EI requests prepared in conjunction with accidents/incidents, ground accidents/incidents, and impending malfunctions when it is evident that an unsafe condition exists.

2. When additional technical or engineering information is required to complete an accident report.

3. When aircraft readiness is seriously impaired due to poor material (including SE) reliability/maintainability/logistic support.

4. When a component is rejected by the Navy Oil Analysis Program (NOAP) after attempted authorized repairs are exhausted at the organizational and intermediate levels.

5. When specifically directed by higher authority.

All requests for EIs are submitted to the CFA, which will study the history of similar equipment failures and determine the potential value of conducting an EI on the equipment in question. If the study indicates that an EI is not required, the CFA so informs (by message) the requesting activity. If the study indicates an EI is warranted, the CFA assigns a control number to the investigation and provides shipping instructions to the requesting and holding activities by message. Whether an EI is warranted or not, the CFA must respond by message within 5 calendar days after receipt of the EI request to the requesting activity. For an approved EI request, the CFA will follow up on equipment not received from the holding activity within 20 days. Activities should maintain each EI on file for a period of 1 year.

QUALITY DEFICIENCY REPORT (QDR)

This report provides maintenance activities with a method for reporting deficiencies in new material or reworked material that may be attributable to nonconformance to contractual or specification requirements or substandard workmanship.

New material is defined as material procured under contract from industry or manufactured by an in-house facility that is still under warranty. All material, whether in actual operation or on the shelf, is considered new until the warranty expires.

Reworked material is that material overhauled, rebuilt, repaired, or modified by government or commercial activities but unproven in actual operations.

The category I (CAT I) QDR is a report on a quality deficiency, which will, or may, affect life or limb of personnel or impair the combat capabilities of the using organization or individual or that affects operational capability to the extent that mission accomplishment is jeopardized. The category II (CAT II) type of QDR is made on all other deficiencies that do not meet the criteria set forth in category I.

FROM: USS ARTHUR W RADFORD
TO: NAVAVNDEPOT PENSACOLA FL
AIG FOUR TWO THREE
INFO: COMSEABASEDASWWINGSLANT JACKSONVILLE FL
COMHELSEACONWING ONE NORFOLK VA
HELANTISUBRON LIGHT TWO THREE
HELANTISUBRON LIGHT THREE ZERO
HELANTISUBRON LIGHT THREE TWO
HELANTISUBRON LIGHT THREE SIX
HELANTISUBRON LIGHT THREE FOUR DET ONE
USCOMSOLANT
UNCLAS //N04790//
SUBJ: ENGINEERING INVESTIGATION REQUEST
MSGID/GENADMIN/HSL-23 DET 2//
REF/A/DOC/OPNAV/01JAN89//
AMPN/OPNAVINST 4790.2E//
RMKS/1. HSL-23 DET 2/23456
2. NADEP PENSACOLA
3. V23456-88-0002
4. 8125/DEPLOYED
5. 2RH 1615-01-010-9102 BH
6. TAIL ROTOR GEARBOX
7. NADEP PENSACOLA
8. KG7165Z-5
9. SER 021-90M-91
10. N/A
11. REWORKED
12. REWORKED 18 NOV 87
13. 2359.6 SINCE NEW. 888.8 SINCE OVERHAUL
14. N/A
15. N/A
16. SH-2F
17. $7100.00/UNK
18. N/A
19. UNK
20. 26210
21. HOLDING ON USS ARTHUR W RADFORD FOR 30 DAYS FOR SHIPPING INSTRUCTIONS.
22. A. REMOVED ON ADVICE OF NOAP LAB NADEP NORFOLK DUE TO VERY HIGH IRON AND INCREASING COPPER CONTENT.
B. POSSIBLE LOSS OF AIRCRAFT/AIRCREW.
C. NONE
D. OIL ANALYSIS
E. THROUGH H. N/A
I. LT. T.E. BOGGS, DET MO, DEPLOYED
J. 149769
K. AND L. N/A//

Figure 5-3.-Sample Engineering Investigation (EI) Request.

The CAT I QDR (fig. 5-4) is submitted by routine precedence message within 2 working days after discovery of the deficiency (unless combined with an HMR/EMR). The CAT II QDR (figs. 5-5 and 5-6) is submitted on an standard form (SF) 368 within 5 working days after discovery of the deficiency to the CFA. Instructions on how to prepare the CAT II QDR using SF 368 are listed below:

Section I. Section I is to be completed by the originating point as the information is applicable and available.

FROM: TRARON SEVEN SIX
TO: NAVAVNDEPOT NORTH ISLAND CA
AIG FOUR TWO THREE
INFO: COMTRAWING SEVEN
NAS MERIDIAN MS
UNCLAS //N04790//
SUBJ: CAT I QUALITY DEFICIENCY REPORT
MSGID/GENADMIN/VT-76 QA//
REF/A/DOC/OPNAV/01JAN89//
AMPN/OPNAVINST 4790.2E//
RMKS/1. VT-76/34567
2. NAVAVNDEPOT NORIS
3. N34567-88-0012
4. 8068/NAS MERIDIAN MS
5. 1RD 2620-00-099-1848 SZ
6. TIRE
7. GOODYEAR 86896
8. 44319628
9. SER K339-5M-2
10. UNK
11. NEW
12. UNK
13. NO TIME
14. NO
15. A. REC'D 4
B. INSP 4
C. DEFICIENT 3
D. IN STOCK 5
16. T-2C
17. UNK
18. N/A
19. YES
20. 13510
21. HOLDING 30 DAYS AT NAS MERIDIAN SUPPLY BLDG 601 PENDING DISPOSITION INSTRUCTIONS
22. A. TIRES REC'D FROM SUPPLY. INSPECTION REVEALED TIRES UNACCEPTABLE DUE TO SIDEWALLS BLISTERED ON TWO TIRES, BEAD SHOWS CRACKS ON ONE TIRE.
B. DAMAGE TO A/C AND MAINTENANCE PERSONNEL
C. NONE
D. VISUAL INSPECTION/RECEIPT
E. N/A
F. THROUGH H. N/A
I. AMSC P. T. JONES, LINE CPO, AUTOVON 564-3494
J. THROUGH L. N/A//

Figure 5-4.-Sample Category I Quality Deficiency Report (CAT I QDR).

Item 1. From (Originating point). The originating point enters their address in block 1a, the name, duty phone, and signature of an individual who can serve as a contact for questions regarding the report in block 1b, and the date the report was signed and forwarded to the screening or action point in block 1c.

Item 2. To (Screening point). The originating point will complete the name of screening point activity, the activity address code, address including zip code of the screening point where the report needs to be sent by the originator's activity in block 2a, the name, telephone number and signature of the individual who may serve as the screening point's point of contact in block 2b, and the date the person finished processing the report at the screening point in block 2c.

PRODUCT QUALITY DEFICIENCY REPORT ☐ CATEGORY I ☐ CATEGORY II

1a. FROM (Originator)		2a. TO (Screening Point)	
1b. NAME, TELEPHONE NO. AND SIGNATURE	1c. DATE	2b. NAME, TELEPHONE NO. AND SIGNATURE	2c. DATE

3. REPORT CONTROL NO.	4. DATE DEFICIENCY DISCOVERED	5. NATIONAL STOCK NUMBER (NSN)	6. NOMENCLATURE
7a. MANUFACTURE/CITY/STATE	7b. MFRS. CODE	7c. SHIPPER/CITY/STATE	8. MFRS. PART NO.
9. SERIAL/LOT/BATCH NO.	10a. CONTRACT NO.	10b. PURCHASE ORDER NO.	10C. REQUISITION NO. / 10d. GBL NO.
11. ITEM ☐ NEW ☐ REPAIRED/ OVERHAULED	12. DATE RECD., MFRD, RE-PAIRED, OR OVERHAULED	13. OPERATING TIME AT FAILURE	14. GOVERNMENT FURNISHED MATERIAL ☐ YES ☐ NO

15. QUANTITY	a. RECEIVED	b. INSPECTED	c. DEFICIENT	d. IN STOCK
16. DEFICIENT ITEM	a. END ITEM (AIRCRAFT, MOWER, ETC.)	(1) TYPE/MODEL/SERIES		(2) SERIAL NO.
WORKS ON/WITH	b. NEXT HIGHER ASSEMBLY	(1) NATIONAL STOCK NO. (NSN)	(2) NOMENCLATURE / (3) PART NO.	(4) SERIAL NO.

17. UNIT COST $	18. ESTIMATED REPAIR COST $	19a. ITEM UNDER WARRANTY ☐ YES ☐ NO ☐ UN-KNOWN	19b. EXPIRATION DATE

20. WORK UNIT CODE/EIC (NAVY AND AIR FORCE ONLY.)

21. ACTION/DISPOSITION ☐ HOLDING EXHIBIT FOR____DAYS ☐ INVESTIGATION ☐ RELEASED FOR ☐ TO STOCK ☐ RETURNED ☐ OF ☐ DISPOSED ☐ REPAIRED ☐ OTHER (EXPLAIN IN ITEM 22)

22. DETAILS (Describe, to best ability, what is wrong, how and why, circumstances prior to difficulty, description of difficulty, cause, action taken, including disposition, recommendations. Attach copies of supporting documents. Continue on separate sheet if necessary.)

SAMPLE

23. LOCATION OF DEFICIENT MATERIAL

24a. TO (Action Point)		25a. TO (Support Point) (Use Items 26 and 27 if more than one)	
24b. NAME, TELEPHONE NO. AND SIGNATURE	24c. DATE	25b. NAME, TELEPHONE NO. AND SIGNATURE	25c. DATE
26a. TO (Support Point)		27a. TO (Support Point)	
26b. NAME, TELEPHONE NO. AND SIGNATURE	26c. DATE	27b. NAME, TELEPHONE NO. AND SIGNATURE	27c. DATE

NSN 7540-00-133-5541 **STANDARD FORM 368** (REV. 10-85)

Figure 5-5.-Sample Category II Quality Deficiency Report (CAT II QDR), Standard Form (SF) 368 (Front).

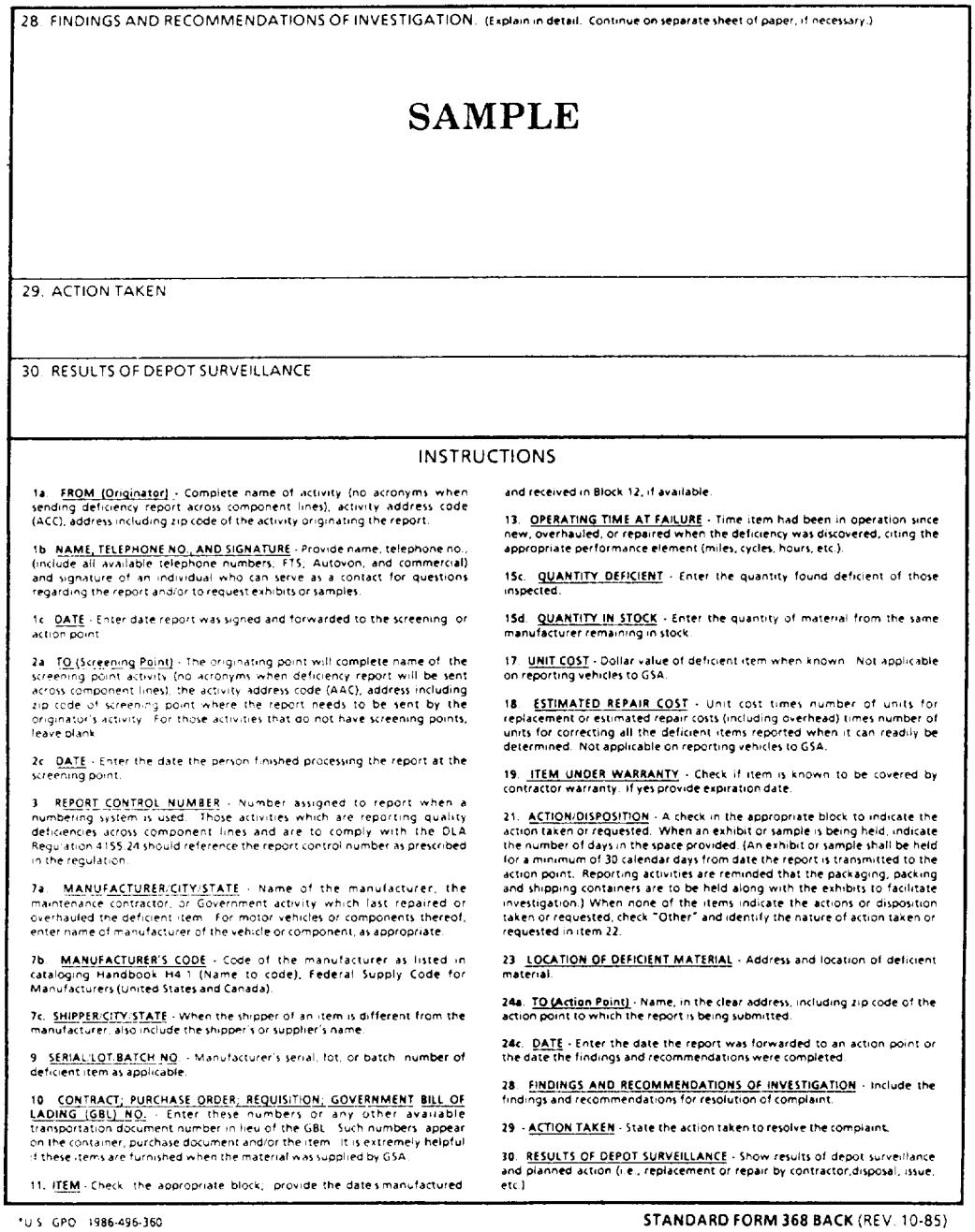
Item 3. Enter the Report Control Number (RCN).

Item 4. Date Deficiency Discovered. Enter the Julian date the deficiency discovered.

Item 5. National Stock Number. Enter the national stock number of the deficient material.

Item 6. Nomenclature. Enter the nomenclature of the material found to be deficient.

Item 7. Enter the name/city/state of the manufacturer, maintenance contractor, or government activity that last repaired or overhauled the deficient item in block 7a, the manufacturers code in block 7b, and when the shipper of the item is different from the



28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION. (Explain in detail. Continue on separate sheet of paper, if necessary.)

SAMPLE

29. ACTION TAKEN

30. RESULTS OF DEPOT SURVEILLANCE

INSTRUCTIONS

1a. FROM (Originator) - Complete name of activity (no acronyms when sending deficiency report across component lines), activity address code (ACC), address including zip code of the activity originating the report.

1b. NAME, TELEPHONE NO., AND SIGNATURE - Provide name, telephone no., (include all available telephone numbers; FTS, Autovon, and commercial) and signature of an individual who can serve as a contact for questions regarding the report and/or to request exhibits or samples.

1c. DATE - Enter date report was signed and forwarded to the screening or action point.

2a. TO (Screening Point) - The originating point will complete name of the screening point activity (no acronyms when deficiency report will be sent across component lines), the activity address code (AAC), address including zip code of screening point where the report needs to be sent by the originator's activity. For those activities that do not have screening points, leave blank.

2c. DATE - Enter the date the person finished processing the report at the screening point.

3. REPORT CONTROL NUMBER - Number assigned to report when a numbering system is used. Those activities which are reporting quality deficiencies across component lines and are to comply with the DLA Regulation 4155.24 should reference the report control number as prescribed in the regulation.

7a. MANUFACTURER/CITY/STATE - Name of the manufacturer, the maintenance contractor, or Government activity which last repaired or overhauled the deficient item. For motor vehicles or components thereof, enter name of manufacturer of the vehicle or component, as appropriate.

7b. MANUFACTURER'S CODE - Code of the manufacturer as listed in cataloging Handbook H4 1 (Name to code), Federal Supply Code for Manufacturers (United States and Canada).

7c. SHIPPER/CITY/STATE - When the shipper of an item is different from the manufacturer, also include the shipper's or supplier's name.

9. SERIAL/LOT/BATCH NO. - Manufacturer's serial, lot, or batch number of deficient item as applicable.

10. CONTRACT; PURCHASE ORDER; REQUISITION; GOVERNMENT BILL OF LADING (GBL) NO. - Enter these numbers or any other available transportation document number in lieu of the GBL. Such numbers appear on the container, purchase document and/or the item. It is extremely helpful if these items are furnished when the material was supplied by GSA.

11. ITEM - Check the appropriate block; provide the date s manufactured and received in Block 12, if available.

13. OPERATING TIME AT FAILURE - Time item had been in operation since new, overhauled, or repaired when the deficiency was discovered, citing the appropriate performance element (miles, cycles, hours, etc.).

15c. QUANTITY DEFICIENT - Enter the quantity found deficient of those inspected.

15d. QUANTITY IN STOCK - Enter the quantity of material from the same manufacturer remaining in stock.

17. UNIT COST - Dollar value of deficient item when known. Not applicable on reporting vehicles to GSA.

18. ESTIMATED REPAIR COST - Unit cost times number of units for replacement or estimated repair costs (including overhead) times number of units for correcting all the deficient items reported when it can readily be determined. Not applicable on reporting vehicles to GSA.

19. ITEM UNDER WARRANTY - Check if item is known to be covered by contractor warranty. If yes provide expiration date.

21. ACTION/DISPOSITION - A check in the appropriate block to indicate the action taken or requested. When an exhibit or sample is being held, indicate the number of days in the space provided. (An exhibit or sample shall be held for a minimum of 30 calendar days from date the report is transmitted to the action point. Reporting activities are reminded that the packaging, packing and shipping containers are to be held along with the exhibits to facilitate investigation.) When none of the items indicate the actions or disposition taken or requested, check "Other" and identify the nature of action taken or requested in item 22.

23. LOCATION OF DEFICIENT MATERIAL - Address and location of deficient material.

24a. TO (Action Point) - Name, in the clear address, including zip code of the action point to which the report is being submitted.

24c. DATE - Enter the date the report was forwarded to an action point or the date the findings and recommendations were completed.

28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION - Include the findings and recommendations for resolution of complaint.

29. - ACTION TAKEN - State the action taken to resolve the complaint.

30. RESULTS OF DEPOT SURVEILLANCE - Show results of depot surveillance and planned action (i.e., replacement or repair by contractor,disposal, issue, etc.)

*U.S. GPO: 1986-496-360

STANDARD FORM 368 BACK (REV. 10-85)

Figure 5-6.-Sample Category II Quality Deficiency Report (CAT II QDR), Standard Form (SF) 368 (Back).

manufacturer, include the shipper's or supplier's name/city/state in block 7c.

Item 8. Manufacturer's Part Number. Self explanatory.

Item 9. Serial/Lot/Batch No. As applicable, enter the serial number, lot number, or batch number of the deficient material. Use item 22 if required.

Item 10. Enter the contract number in block 10a, the purchase order number in block 10b, the requisition number in block 10c, and the government bill of lading (GBL) number in block 10d.

Item 11. Item is New, Repaired, or Overhauled. Check the appropriate block to identify if the material is either new, repaired or overhauled.

Item 12. Date Manufactured, Repaired, or Overhauled. If the material is repaired or overhauled, enter the last repair or overhaul date.

Item 13. Enter operating time at failure (based on entry in block 12). Indicate the time material had been in service since new or since last repair, modification, or overhaul for rework material.

Item 14. Government Furnished Material. Government furnished material is any material that belongs to the government and is furnished to a contractor for some purpose. Check the appropriate block.

Item 15. Quantity. Quantity is a count of each individual item, disregarding unit of issue.

a. Received. Enter the number of items received.
b. Inspected. Enter the number of items inspected.
c. Deficient. Enter the number of items that were determined to be deficient as a result of inspection.
d. In Stock. Enter the number of items in stock, as applicable.

Item 16. Deficient Item Works On or With. Not applicable when reporting common/general type material received from supply but not installed or peculiar to a specific type of aircraft.

Item 17. Dollar Value of Deficient Items. Enter the dollar value of the material reported as being deficient, if known.

Item 18. Estimated Repair Cost. Enter the estimated cost and man-hours required to correct the discrepancy.

Item 19. Item Under Warranty. Check appropriate block in block 19a, and enter the expiration date of warranty in block 19b.

Item 20. Work Unit Code/Equipment Identification Code. Enter the most specific code available.

Item 21. Action or Disposition. Check one of the blocks to indicate the nature of the action taken or requested concerning the deficient material. If an exhibit is being held, indicate the number of days the exhibit will be held by completing the space provided (holding exhibit for XX days). If none of the blocks indicate the action or disposition taken or requested, check the other block and identify the nature of the action taken or requested in Item 22.

Item 22. Details. This item provides valuable information concerning the deficiency. For a fully comprehensive report, the following types of information should be entered in this item, if applicable and available:

- The requisition number under which the material was received.
- Describe how the safety of personnel or the activity mission is affected by the use of the defective item.
- Name of the activity that supplied the material.
- Date of receipt.
- Date of packaging.
- Explain what is wrong with the item or how it is different from an acceptable item to the best of the originator's ability. Explain how the item does not function with relating parts or assemblies, etc. Include specific violations of specifications, pertinent regulations, instructions, contracts, etc. Indicate if an exhibit is being held.

● How deficiency was detected or confirmed; i.e., visual inspection, functional operation, etc.

● Include the number of previous known deficiencies concerning these items.

● Where the deficiency condition was discovered; that is, receipt inspection, during cyclical inspection, during maintenance, special inspection directed by inventory control point, etc.

● Include storage and/or handling information when it appears that these factors have contributed to the deficiency being reported.

● List the supporting documents included whenever possible. When photographs are taken, a 12-inch or other ruler should be used and a scale placed alongside the object, which should appear in each photograph. Measurements should also be shown on sketches.

Section II. Section II is to be completed by the action and support point, as applicable.

Item 23. Location of Deficient Material. Address and location where the exhibit is being held.

Item 24. To (Action Point). A focal point, identified within each component of the Armed Services, responsible for the resolution of a reported product quality deficiency, including necessary collaboration with support points. The screening point will enter the name and address of the action point to which the report is being submitted in block 24a; the action point will enter the name, duty phone, and signature of the individual who may serve as the action point's point of contact in block 24b; and the date the report was signed by the individual identified in block 24b is entered in block 24c.

Item 25. To (Support Point). An activity, for example, Naval Aviation Depot Operations Center (NAVAVNDEPOTOPSCEN), commercial rework activity, procurement contracting office, Naval Aviation Depot (NAVAVNDEPOT), Naval Plant Representative Office (NAVPRO), or local engineering support office, that assists the action point, when requested, by conducting and providing results of a special analysis or investigation pertinent to correction and prevention of a reported deficiency is entered in block 25a (if more than one support point is involved, items 26 and 27 should be used). The name, telephone number, and signature of the individual who may serve as the support point's point of contact is entered in block 25b, and the date the report was signed by the individual identified in block 25b is entered in block 25c.

Items 26a and 27a. These blocks are used to address the reply from the action point to additional screening point (s).

Items 26b and 27b. Name, telephone number, and signature: The additional support point(s) will enter the name(s), duty phone number(s), and signature of the individual(s) who may serve as the support point's point of contact.

Items 26c and 27c. Date: Enter date(s) the report was signed by the individual(s) in block 26b and 27b.

Item 28. Findings and Recommendations of Investigation:. The final reply will include the following:

● The findings of the investigation conducted.

● Disposition instructions for deficient material, when appropriate.

● Need for alert notifications or field fix bulletins, if applicable.

● A comment regarding allowance for credit or no credit for the material reported as deficient, if applicable.

● When appropriate, provide other screening points of known military users with the results of the investigation and the corrective actions.

Item 29. Action Taken: Explain what corrective action was taken to preclude recurrence.

Item 30. Results of Depot Surveillance: Show results of depot surveillance and planned action; for example, replacement or repair by contractor, disposal, or issue.

AIRCRAFT DISCREPANCY REPORT (ADR)

This report provides a direct method for reporting minor, major and/or critical

discrepancies in quality assurance procedures to aircraft manufacturers, NAVAVNDEPOTs, and other activities performing maintenance on aircraft. This method of reporting is not used in lieu of the NAMDRP; it compliments the program. It simply highlights areas in immediate need of attention to ensure a more acceptable standard of quality in aircraft maintenance and rework procedures.

Effective use of SF 368 in initiating corrective or preventative action is dependent upon a clear description of discrepancies and corrective actions taken to identify the problem and the parts involved to permit objective analysis of each discrepancy. (Figures 5-7 and 5-8 show a sample ADR using SF 368).

Equipment shortages, ferry or shipping damages, deterioration during pool storage, or

PRODUCT QUALITY DEFICIENCY REPORT — ☐ CATEGORY I ☐ CATEGORY II

1a. FROM (Originator) HSL THREE TWO NAS NORFOLK, VA 23511-5593		2a. TO (Screening Point) NAVAL AVIATION DEPOT OPERATIONS CENTER (NADOC 410) PATUXENT RIVER, MD 20670-5449	
1b. NAME, TELEPHONE NO. AND SIGNATURE CDR D. POTTER, AV 356-4692, COM. (301) 863-4692	1c. DATE 29 Jan 87	2b. NAME, TELEPHONE NO. AND SIGNATURE JACK JONES, AV 356-4692, COM., (301) 863-4692	2c. DATE
3. REPORT CONTROL NO. V68626-87-0003	4. DATE DEFICIENCY DISCOVERED 21 Jan 87	5. NATIONAL STOCK NUMBER (NSN) N/A	6. NOMENCLATURE AIRCRAFT DISCREPANCY REPORT
7a. MANUFACTURE/CITY/STATE HAYES INTERNATIONAL/DOTHAN/AL	7b. MFRS. CODE N/A	7c. SHIPPER/CITY/STATE N/A	8. MFRS. PART NO. N/A
9. SERIAL/LOT/BATCH NO. N/A	10a. CONTRACT NO. N64107-86-C-9006	10b. PURCHASE ORDER NO. N/A	10C. REQUISITION NO. N/A	10d GBL NO. N/A
11. ITEM ☐ NEW ☒ REPAIRED/ OVERHAULED	12. DATE RECD., MFRD, RE-PAIRED, OR OVERHAULED 20 JAN 87	13. OPERATING TIME AT FAILURE N/A	14. GOVERNMENT FURNISHED MATERIAL ☐ YES ☐ NO N/A
15. QUANTITY	a. RECEIVED N/A	b. INSPECTED N/A	c. DEFICIENT N/A	d. IN STOCK N/A
16. DEFICIENT ITEM WORKS ON/WITH — a. END ITEM (AIRCRAFT, MOWER, ETC.)	(1) TYPE/MODEL/SERIES SH-2F			(2) SERIAL NO. 152191
b. NEXT HIGHER ASSEMBLY	(1) NATIONAL STOCK NO. (NSN) N/A	(2) NOMENCLATURE N/A	(3) PART NO. N/A	(4) SERIAL NO. N/A
17. UNIT COST $ N/A	18. ESTIMATED REPAIR COST $ N/A	19a. ITEM UNDER WARRANTY ☐ YES ☐ NO ☒ UN-KNOWN	19b. EXPIRATION DATE	
20. WORK UNIT CODE/EIC (NAVY AND AIR FORCE ONLY.) N/A				
21. ACTION/DISPOSITION ☐ HOLDING EXHIBIT FOR_____DAYS ☐ INVESTIGATION ☐ TO STOCK ☐ OF ☐ REPAIRED ☐ IN ITEM 22)	RELEASED FOR	RETURNED	DISPOSED	OTHER (EXPLAIN

22. DETAILS (Describe, to best ability, what is wrong, how and why, circumstances prior to difficulty, description of difficulty, cause, action taken, including disposition, recommendations. Attach copies of supporting documents. Continue on separate sheet if necessary.)

INITIAL ACCEPTANCE OF AIRCRAFT

SAMPLE

1. CRITICAL: HSL-34 CAT I QDR MSG 211750Z JAN 87
REPORT CONTROL NUMBER V68626-87-0002 REPORTED AZIMUTH LOWER LINK (WUC) 14916 IMPROPERLY TORQUED.
RE-TORQUED. 4.3 MAN-HOURS

2. MAJOR: SPEED #1 DECREASER GEARBOX (SDGB) (WUC 26221) CORRODED BEYOND LIMITS AKOUND TOP CHIP DETECTOR MOUNT BOX. CHANGED SDGB. 71 MAN-HOURS.

3. MINOR: NO WEIGHT AND BALANCE ENTRY FOR AFC's 243, 223, 235, 236, and 239. ENTRIES MADE. 1.2 MAN-HOURS

23. LOCATION OF DEFICIENT MATERIAL N/A			
24a. TO (Action Point) DCASPRO HAYES HAYES INTERNATIONAL CORP. DOTHAN, AL 36301		25a. TO (Support Point) (Use Items 26 and 27 if more than one) NAVAL AVIATION DEPOT (Q&RA) NAS PENSACOLA, FL 32508	
24b. NAME, TELEPHONE NO. AND SIGNATURE	24c. DATE	25b. NAME, TELEPHONE NO. AND SIGNATURE	25c DATE
26a. TO (Support Point) HELICOPTER SEA CONTROL WING ONE, NAS NORFOLK, VA 23511		27a. TO (Support Point) COMNAVAIRLANT (Code 52) NAS NORFOLK, VA 23511-5188	
26b. NAME, TELEPHONE NO. AND SIGNATURE	26c. DATE	27b. NAME, TELEPHONE NO. AND SIGNATURE	27c. DATE

NSN 7540-00-133-5541 **STANDARD FORM 368** (REV. 10-85)

Figure 5-7.-Sample Aircraft Discrepancy Report (ADR), Standard Form (SF) 368 (Front).

28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION. (Explain in detail. Continue on separate sheet of paper, if necessary.)

SAMPLE

29. ACTION TAKEN

30. RESULTS OF DEPOT SURVEILLANCE

INSTRUCTIONS

1a. FROM (Originator) - Complete name of activity (no acronyms when sending deficiency report across component lines), activity address code (ACC), address including zip code of the activity originating the report.

1b. NAME, TELEPHONE NO., AND SIGNATURE - Provide name, telephone no., (include all available telephone numbers; FTS; Autovon, and commercial) and signature of an individual who can serve as a contact for questions regarding the report and/or to request exhibits or samples.

1c. DATE - Enter date report was signed and forwarded to the screening or action point.

2a. TO (Screening Point) - The originating point will complete name of the screening point activity (no acronyms when deficiency report will be sent across component lines), the activity address code (AAC), address including zip code of screening point where the report needs to be sent by the originator's activity. For those activities that do not have screening points, leave blank.

2c. DATE - Enter the date the person finished processing the report at the screening point.

3. REPORT CONTROL NUMBER - Number assigned to report when a numbering system is used. Those activities which are reporting quality deficiencies across component lines and are to comply with the DLA Regulation 4155.24 should reference the report control number as prescribed in the regulation.

7a. MANUFACTURER/CITY/STATE - Name of the manufacturer, the maintenance contractor, or Government activity which last repaired or overhauled the deficient item. For motor vehicles or components thereof, enter name of manufacturer of the vehicle or component, as appropriate.

7b. MANUFACTURER'S CODE - Code of the manufacturer as listed in cataloging Handbook H4.1 (Name to code), Federal Supply Code for Manufacturers (United States and Canada).

7c. SHIPPER/CITY/STATE - When the shipper of an item is different from the manufacturer, also include the shipper's or supplier's name.

9. SERIAL/LOT/BATCH NO. - Manufacturer's serial, lot, or batch number of deficient item as applicable.

10. CONTRACT; PURCHASE ORDER; REQUISITION; GOVERNMENT BILL OF LADING (GBL) NO. - Enter these numbers or any other available transportation document number in lieu of the GBL. Such numbers appear on the container, purchase document and/or the item. It is extremely helpful if these items are furnished when the material was supplied by GSA.

11. ITEM - Check the appropriate block; provide the dates manufactured and received in Block 12, if available.

13. OPERATING TIME AT FAILURE - Time item had been in operation since new, overhauled, or repaired when the deficiency was discovered, citing the appropriate performance element (miles, cycles, hours, etc.).

15c. QUANTITY DEFICIENT - Enter the quantity found deficient of those inspected.

15d. QUANTITY IN STOCK - Enter the quantity of material from the same manufacturer remaining in stock.

17. UNIT COST - Dollar value of deficient item when known. Not applicable on reporting vehicles to GSA.

18. ESTIMATED REPAIR COST - Unit cost times number of units for replacement or estimated repair costs (including overhead) times number of units for correcting all the deficient items reported when it can readily be determined. Not applicable on reporting vehicles to GSA.

19. ITEM UNDER WARRANTY - Check if item is known to be covered by contractor warranty. If yes provide expiration date.

21. ACTION/DISPOSITION - A check in the appropriate block to indicate the action taken or requested. When an exhibit or sample is being held, indicate the number of days in the space provided. (An exhibit or sample shall be held for a minimum of 30 calendar days from date the report is transmitted to the action point. Reporting activities are reminded that the packaging, packing and shipping containers are to be held along with the exhibits to facilitate investigation.) When none of the items indicate the actions or disposition taken or requested, check "Other" and identify the nature of action taken or requested in item 22.

23. LOCATION OF DEFICIENT MATERIAL - Address and location of deficient material.

24a. TO (Action Point) - Name, in the clear address, including zip code of the action point to which the report is being submitted.

24c. DATE - Enter the date the report was forwarded to an action point or the date the findings and recommendations were completed.

28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION - Include the findings and recommendations for resolution of complaint.

29. - ACTION TAKEN - State the action taken to resolve the complaint.

30. RESULTS OF DEPOT SURVEILLANCE - Show results of depot surveillance and planned action (i.e., replacement or repair by contractor, disposal, issue, etc.)

*U.S. GPO: 1986-496-360

STANDARD FORM 368 BACK (REV. 10-85)

Figure 5-8.-Sample Aircraft Discrepancy Report (ADR), Standard Form (SF) 368 (Back).

other discrepancies that do not directly pertain to the quality of rework or manufacture are not reported by the reporting custodian. ADRs should not include discrepancies that are not a part of the negotiated work package of rework or specification.

An acceptance inspection is performed as soon as possible after the aircraft is delivered and prior to maintenance (other than required to complete the acceptance inspection) or further flight. Only those discrepancies noted by the pilot/ferry crew and those found during the acceptance inspection are reported.

Discrepancies discovered during the initial acceptance inspection of aircraft received from a contractor as newly manufactured and those reworked by a Navy, commercial, or interservice activity are reported as an ADR on the SF 368. If no deficiencies are found during the acceptance inspection, a negative report will be submitted stating, "No discrepancies noted. Reply not required."

The cognizant naval plant representative officer or other administrating contract officer/ NAVAVNDEPOT encloses sufficient copies of the SF 368 with envelopes appropriately pre-addressed in each aircraft logbook for delivery with the aircraft. For the most part, completion of the SF 368 is self-explanatory. A report control number is assigned to each report. Each report control number commences with 0001 at the beginning of each calendar year and progresses consecutively throughout the year.

A report is required on each newly reworked aircraft received. It should be completed as soon as possible after completion of the aircraft acceptance inspection, but in no case prepared later than 30 days after receipt of the aircraft.

The discrepancies that are entered on the report are usually furnished to QA by personnel in the production divisions. If the space for reporting discrepancies on one form is insufficient, a separate sheet of paper is issued.

The report is used to report critical, major, and minor discrepancies found by the using activity on aircraft received from a contractor or a rework activity as well as to evaluate the rework activity's quality control system. Critical, major and minor discrepancies are defined as follows:

Defect, Critical. A defect that constitutes a hazardous or unsafe condition, thus making the aircraft unsafe for flight or endangering operating personnel.

Defect, Major. A defect, other than critical that could result in failure or materially reduce the usability of the unit or part for its intended purpose.

Defect, Minor. A defect that is not likely to reduce materially the usability of the unit or part for its intended purpose.

After completion, the original report is forwarded to the aircraft manufacturer (in case of new aircraft) or to the NAVAVNDEPOT/ commercial rework activities.

A copy of each report is forwarded to the controlling custodian, the cognizant commander, fleet air functional wing, and the cognizant NAVAVNDEPOT. For newly manufactured aircraft, a copy is forwarded to the contract administration office (CAO) and to the Commander, Naval Air Systems Command. For aircraft reworked at NAVAVNDEPOT, a copy is forwarded to Naval Aviation Depot Operations Center (NAVAVNDEPOTOPSCEN). For aircraft commercially reworked, a copy is forwarded to CAO and to Naval Aviation Depot Operations Center (NAVAVNDEPOTOPSCEN).

TECHNICAL PUBLICATION DEFICIENCY REPORT (TPDR)

Occasionally, the AZ working as publications librarian will discover deficiencies in publications. More often, deficiencies will be discovered by personnel who are or have been using the technical publications. In such cases, the technical librarian should report the deficiency in accordance with the information discussed below.

This report provides a simplified procedure for reporting technical publication safety hazards and routine deficiencies. There are two different

categories for reporting technical publication deficiencies that are explained below:

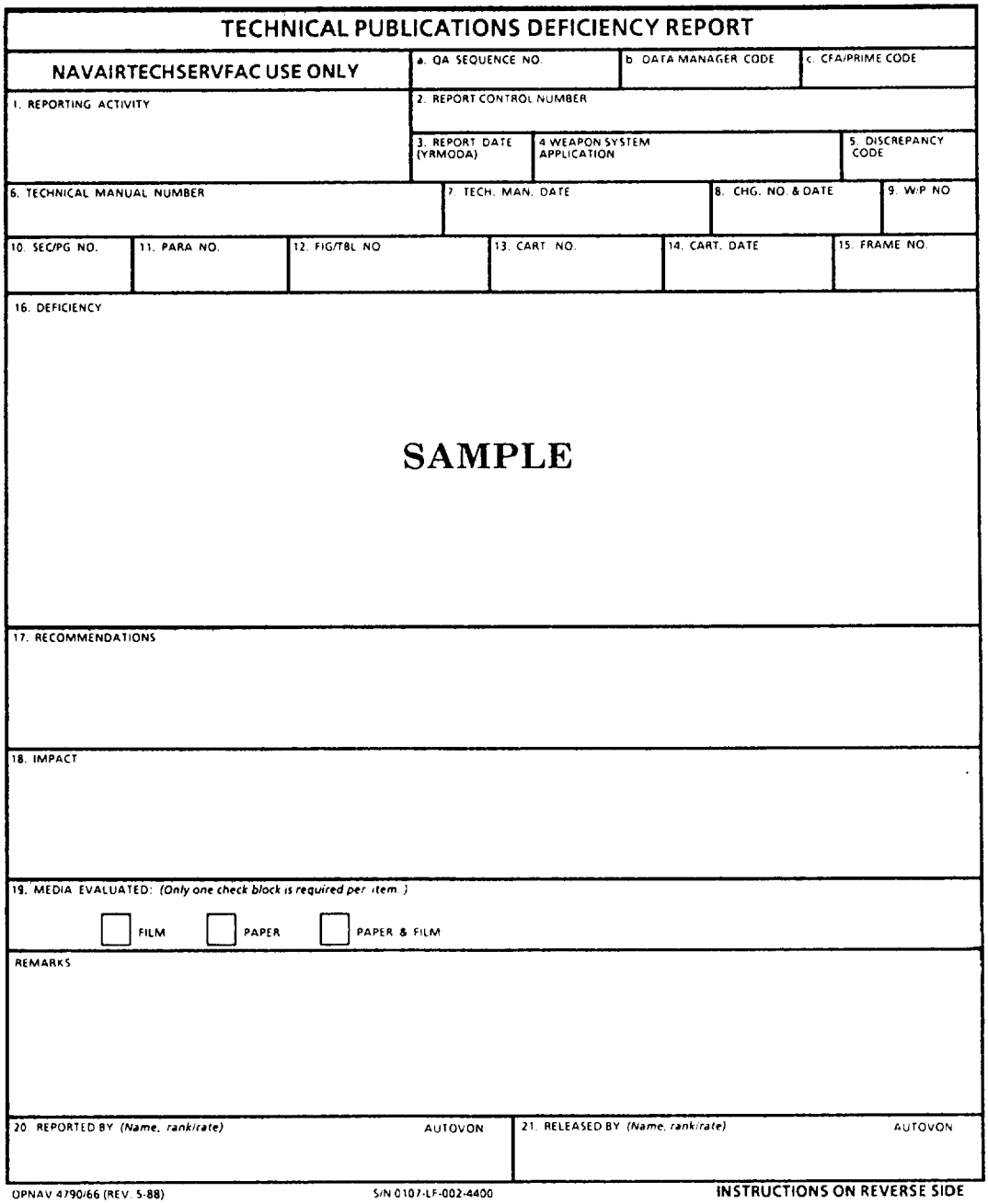
CAT I TPDR. This report is submitted by using the CAT I TPDR message format (fig. 5-9) when a technical publication deficiency is detected that, if not corrected, could result in death or injury to personnel or damage to or loss of aircraft, equipment, or facilities. The importance of submitting a message as soon as possible for these types of deficiencies is strongly emphasized.

FROM: USS MIDWAY
TO: NAVAIRTECHSERVFAC PHILADELPHIA PA
NAVWPNCEN CHINA LAKE CA
AIG FOUR TWO THREE
INFO: COMFAIRWESTPAC ATSUGI JA
COMLATWINGPAC LEMOORE CA
UNCLAS //N04790//
SUBJ: CAT I TECHNICAL PUBLICATION DEFICIENCY REPORT
MSGID/GENADMIN/AIMD//
REF/A/DOC/OPNAV/01JAN89//
REF/B/DOC/NAVAIR/15FEB83//
NARR/REF A IS OPNAVINST 4790.2E, REF B IS NAVAIR 13-1-6.2 BASIC DTD 15 FEB 83/RAC 69 DTD 1 FEB 85//
RMKS/1. USS MIDWAY (CV-41)/03341
2. NAVWPNCEN CHINA LAKE CA
3. R03341-88-0017
4. 8187/USS MIDWAY
5. 0513-LP-000-2150
6. THROUGH 21. N/A
22. A. NA 13-1-6.2
B. NES-12 PARACHUTE ASSY
C. 15 FEB 1983
D. RAC 69 DTD 1 FEB 1985
E. N/A
F. 15-12c
G. 15-18a-14
H. 15-12c
I. THROUGH K. N/A
L. ASSEMBLY INDUCTED INTO AIMD FOR SCHEDULED REPACK AND USE AS A TRAINING AID DURING A LECTURE GIVEN BY AIMD PARALOFT PERSONNEL TO CVW-5 A-7E PILOTS DURING A SAFETY STAND-DOWN. DURING EXPLANATION AND ACTIVATION OF THE FOUR-LINE RELEASE SYSTEM, THE "DAISY CHAIN" SECURING LINES 1 AND 2 FAILED TO UNCHAIN. INVESTIGATION REVEALED THAT THE "FF" THREAD ENTERS AND EXITS THE FLUTE TOO CLOSELY. THE INDIVIDUAL THREADS OF THE FLUTE WEBBING WILL BREAK INSTEAD OF THE "FF" THREAD. IF THE LAST LOOP OF THE "DAISY CHAIN" IS NOT PULLED INTO THE FLUTE TO POSITION IT DIRECTLY UNDER THE ENTRY AND EXIT POINTS OF THE "FF" THREAD IN THE FLUTE, THE THREAD WILL BREAK BUT COULD BE PULLED THROUGH THE FLUTE WEBBING AND BE OF SUFFICIENT LENGTH TO BECOME ENTANGLED IN THE "DAISY CHAIN". THIS COULD CAUSE A "LOCKING" OF THE REMAINING "DAISY CHAIN" AS IT DID IN THIS CASE. IF THE "FF" THREAD DOES NOT PIERCE THE LANYARD THROUGH THE CENTER, BUT ONLY CATCHES A PORTION OF THE OUTER CASING, IT IS POSSIBLE TO RUPTURE THE OUTER CASING OF THE LANYARD AND FAIL TO BREAK THE "FF" THREAD TACKING. PHOTOGRAPHS ARE AVAILABLE UPON REQUEST.
M. RECOMMENDATIONS:
(1) RECOMMEND FOLLOWING WARNING BE INSERTED BETWEEN STEPS 13 AND 14 OF PARA. 15-18A OF REF B: "WARNING" ENSURE THAT ENTRY AND EXIT POINTS OF THE "FF" THREAD ARE AT LEAST 1/4 INCH APART. ENSURE THAT THE LAST LOOP OF THE "DAISY CHAIN" IS PULLED FAR ENOUGH INTO THE FLUTE TO POSITION IT DIRECTLY BENEATH THE ENTRY AND EXIT POINTS OF THE "FF" THREAD.
(2) RECOMMEND THAT FIG 15-12C BE CHANGED TO SHOW EMPHASIS ON SEPARATION OF ENTRY AND EXIT POINTS OF THE "FF" THREAD AND POSITIONING OF THE LAST LOOP.
(3) RECOMMEND THAT ONE TURN OF WAXED NYLON "E" THREAD, SINGLE, BE USED TO SECURE THE LAST LOOP - VICE "FF" THREAD.
(4) RECOMMEND THAT ALL ASSEMBLIES HAVING ACC 383 INCORPORATED BE CHANGED TO REFLECT THE ABOVE RECOMMENDATIONS.
N. PRCS BEALL, AV/EG BRANCH SUPERVISOR, DEPLOYED//.

Figure 5-9.-Sample Category I (CAT I) Technical Publication Deficiency Report Message.

CAT II TPDR. This report is submitted using the Technical Publication Deficiency Report, OPNAV 4790/66 (figs. 5-10 and 5-11), when technical publication deficiencies include technical errors, wrong measurement values, incorrect use of support equipment, wrong sequence of adjustments, part number errors or omissions.

Technical publications include maintenance requirements cards (MRCs), checklists, work unit code (WUC) manuals, shop process cards, maintenance instruction manuals (MIMs), weapons and stores loading manuals, conventional and nuclear weapon checklists, stores reliability cards, illustrated parts breakdowns (IPBs), technical directives (TDs), and technical manuals. The TPDR is not applicable when reporting deficiencies in instructions or notices. Deficiencies in NATOPS manuals should be



TECHNICAL PUBLICATIONS DEFICIENCY REPORT

NAVAIRTECHSERVFAC USE ONLY	a. QA SEQUENCE NO.	b. DATA MANAGER CODE	c. CFA/PRIME CODE
1. REPORTING ACTIVITY	2. REPORT CONTROL NUMBER		
	3. REPORT DATE (YRMODA)	4 WEAPON SYSTEM APPLICATION	5. DISCREPANCY CODE

6. TECHNICAL MANUAL NUMBER	7. TECH. MAN. DATE	8. CHG. NO. & DATE	9. W/P NO

10. SEC/PG NO.	11. PARA NO.	12. FIG/TBL NO	13. CART. NO.	14. CART. DATE	15. FRAME NO.

16. DEFICIENCY

SAMPLE

17. RECOMMENDATIONS

18. IMPACT

19. MEDIA EVALUATED: *(Only one check block is required per item.)*

☐ FILM ☐ PAPER ☐ PAPER & FILM

REMARKS

20. REPORTED BY *(Name, rank/rate)* AUTOVON	21. RELEASED BY *(Name, rank/rate)* AUTOVON

OPNAV 4790/66 (REV. 5-88) S/N 0107-LF-002-4400 INSTRUCTIONS ON REVERSE SIDE

Figure 5-10.-Sample Category II (CAT II) Technical Publication Deficiency Report (OPNAV 4790/66) (Front).

reported in accordance with the latest edition of NAVAIR Instruction 3510.1 or OPNAV Instruction 3500.22.

All activities must submit CAT I TPDR priority messages within 24 hours of discovery of a deficiency. The action addressee for the message report will be the cognizant field activity (CFA) of the equipment, if known, and Naval Air Technical Services Facility (NAVAIRTECHSERVFAC), Code 40.

All activities must submit CAT II routine technical publication deficiencies using OPNAV 4790/66. The original and one copy are sent to NAVAIRTECHSERVFAC, Code 40, and one copy is sent to the CFA of the equipment, if known. A copy is retained by the originating activity for record purposes.

NAVAIRTECHSERVFAC will serve as the central manager for all NAVAIRSYSCOM

INSTRUCTIONS

1. **FROM:** (Reporting Activity.) The Reporting Activity will enter complete mailing address.
2. **REPORT CONTROL NUMBER:** Enter the Report Control Number (RCN).
3. **REPORT DATE:** This identifies the year, month, and the day that the report was prepared, and consists of six digits. The date 15 June 1989 would be presented in the following format: 890615. The first two digits indicating the year (89), the second two digits indicate the month (06), and the remaining two digits specify the day (15).
4. **WEAPON SYSTEM APPLICATION:** Give the specific weapon system against which the deficiency is detected.
5. **DISCREPANCY CODE:** This is a numeric code used to describe the type of discrepancy found in the technical publication being reported deficient. A complete list of codes are as follows:
   1. Typographical Errors
   2. Incorrect Procedures
   3. Schematic Errors
   4. Part Number Errors
   5. SM&R Code Errors
   6. Illustration Errors
   7. Incorrect Values/Tolerances
   8. Incorrect References
   9. Safety (Cautions & Warnings)
   10. Indexing problems
   11. Illegible
   12. Print Error (Head to Toe or information cut off)
   13. Missing/Improperly Collated Pages
   14. Film Density
   15. Cartridge Loading (Wrong Film, Cartridge Indexing, No Film, and Inverted Loading)
   16. Other

   SAMPLE
6. **TECHNICAL MANUAL NUMBER:** Give the complete NAVAIR number assigned to the manual being reported as deficient. Only one Technical Manual should be reported per TPDR.
7. **TECHNICAL MANUAL DATE:** This date appears on the bottom right hand corner of the title page. The date shall be presented in the format described in Item 3.
8. **CHANGE NUMBER AND DATE:** This appears directly under the basic date of the manual on which the deficiency is located. Present date in same format as item 3.
9. **WORK PACKAGE NUMBER:** Enter the number in which the deficiency is located.
10. **SECTION/PAGE NUMBER:** Enter the number of the page of the technical manual on which the deficiency is located.
11. **PARAGRAPH NUMBER:** Enter the specific number in which the deficiency is located.
12. **FIGURE/TABLE:** Enter when an illustration or table is involved in the deficiency.
13. **CARTRIDGE NUMBER:** Enter the number being reported deficient.
14. **CARTRIDGE DATE:** The date shall be presented in the format described in Item 3.
15. **FRAME NUMBER:** Enter the frame number of the cartridge on which the deficiency is located.
16. **DEFICIENCY:** Be very specific. Provide complete information regarding discrepancy, including drawings, schematics, sketches, and references. If necessary, attach copies.
17. **RECOMMENDATION:** Be very specific. Provide complete information regarding the corrective action required, including drawings, schematics, sketches, and references. If necessary, attach copies.
18. **IMPACT:** Enter concise statement of the impact of this discrepancy on work load/ operational readiness.
19. **MEDIA EVALUATED:** Check applicable block for media that is being reported deficient.
20. **REPORTED BY:** Give name, rate/rank, and autovon number of person reporting deficiency to ensure receipt by reporter of notification of action taken.
21. **RELEASED BY:** Name, rank/rate, title, and autovon number of releasing official.

MAIL ORIGINAL AND 1 COPY TO:
Commanding Officer, Naval Air Technical Services Facility, Quality Assurance Dept (40)
700 Robbins Ave., Phila., PA 19111-5097

COPY TO COGNIZANT FIELD ACTIVITY

OPNAV 4790 66 (REV. 5-88) (BACK)

Figure 5-11.-Sample Category II (CAT II) Technical Publication Deficiency Report (OPNAV 4790/66) (Back).

technical publications and will ensure the following:

- Maintain a record of all technical manual deficiencies.

- Acknowledge receipt of each TPDR to the originator and assign CFA action for TPDRs as required. This will be accomplished within 1 working day after receipt of CAT I TPDRs, and within 10 working days after receipt of CAT II TPDRs.

- Coordinate action with CFA and contractor to ensure correction of technical publications.

- Follow-up on each TPDR to ensure corrective action is accomplished.

- Provide TPDR status as required to the ACC/TYCOM.

When the TPDR has been completed, it should be passed on to the librarian's supervisor. The report receives a preliminary review by the supervisor, who, in turn, forwards it into the proper channels for further processing. Further processing normally involves additional review and checking, signing by the quality assurance officer or designated representative, and mailing.

The file copy retained by the librarian provides a means of checking reissues and changes. When reissues or changes to publications, in which discrepancies have been reported, are received in the library, the librarian should check to see if all discrepancies reported by the activity have been corrected. When a reissue contains errors or omissions previously reported, they should be reported again.

A simple method that may be used for checking for outstanding discrepancies requires each publication reported on to be flagged with a colored marker or otherwise identified in a conspicuous place on the front cover. Whenever a flagged or marked publication is replaced by a reissue, it is a simple matter to pull all the TPDR copies pertaining to that publication and check the new issue for the same errors. If all are not correct, new report copies should replace the old ones in the file. In this case, the flag should be transferred to the new basic publication.

DATA ANALYSIS

To obtain more efficient use of information collected by the maintenance data system (MDS), and to increase the effectiveness of the quality assurance program, a qualified data analyst is assigned to the QA/A division. The data analyst must be a senior petty officer formally trained in MDS procedures, data processing, and statistical analysis.

As an AZ3 or AZ2, you will not normally be assigned the duty of data analyst; however, depending on the size of the activity, you might be assigned to assist in the data analyst responsibilities. You will need to have a working knowledge of the responsibilities assigned to the analyst (which were discussed in chapter 1) and become familiar with the MDS reports used by the data analyst to examine and extract important data, which may significantly impact the maintenance effort of your command.

ANALYSIS TECHNIQUES

Analysis techniques include the extraction, examination, and presentation of pertinent data. The resulting analysis products will assist management in attaining effective and economical use of personnel and material resources. The MDS is designed to accumulate factual data pertaining to all phases of maintenance. This data is made available to management in the form of standard MDS reports. The function of analysis is to examine the data contained in these reports and determine what affect the conditions indicated may have on the maintenance effort. Analysis will show favorable and unfavorable conditions in the maintenance plan. The MDS will be of little value if its data is not used to the fullest extent.

Initiation of Analysis

The requirements for analysis may come from various sources and apply to a wide range of maintenance subjects. Analysis may be initiated to provide an answer to a specific problem, or to study selected areas of maintenance, for example, personnel utilization and productivity of work centers. The requirement for analysis should be the result of a "need to know" situation imposed by management. An analysis based on clear, concise requirements is more likely to be meaningful and useful to the maintenance manager than one based on generalities.

Data Selection

Once the subject of the analysis has been identified, the analyst must determine what data will be needed to fulfill the requirement. No standard rules can be applied to this phase of analysis. The analyst must choose wisely, ensuring all facts that have a bearing on the subject are included in the analysis. The analyst must also know which report, or combination of reports, will best provide the needed data.

Data Extraction

The extraction of data is usually a mechanical process; certain columns or lines of the report are screened to identify and select the desired data. Selected data are transposed to some type of work sheet to aid in subsequent steps of the analysis. Design of the work sheet should be simple, allow posting of extracted data in a methodical sequence, and provide space for the computation of totals and subtotals as needed.

Translation of Data

The major portion of the extracted data consists of coded entries, which must be translated into meaningful terms before being analyzed. The design of the work sheet should incorporate translation provisions; for example, columnar headings can contain both coded and descriptive information.

Examination of Data

This process involves the detailed study or examination of all of the data. There is no restriction as to who may do an analysis. In many instances it is desirable that an analysis be completed by a person technically qualified in the subject, although this is not always possible. Identical results may often be obtained through teamwork. For example, personnel assigned to QA/A may accumulate the required data, call in a representative from a work center to examine the data, and jointly prepare a report pertinent to the analysis. Regardless of who accomplished the examination, the intent of the detailed study of the data is the same; that is, (1) to determine if a problem actually exists, (2) to identify the factors contributing to the problem, (3) to list possible conclusions, and (4) to suggest possible alternative courses of action.

SUBMISSION OF SOURCE DOCUMENTS TO THE DATA SERVICE FACILITY

Two copies of the document control form (DCF) (fig. 5-12) are prepared each time the reporting activity submits source documents to the data services facility (DSF).

The documents to be submitted are separated, grouped, and counted. The submitting activity enters, in the appropriate line under Forms Count column 1, the number of documents submitted of that category. The DSF will enter the Julian date and time received, signature, and verify the number of documents by entering their count of the document in the Forms Count column 2,

If, during DSF processing, a document is found to be illegible or otherwise cannot be entered, it is returned to the submitting activity for correction. The questionable data elements are circled in red by the DSF. A total of these rejected documents are entered in the forms reject column. Rejected or late documents submitted after the end of an accounting period must be submitted with a separate document control form (DCF). This data will be processed with the next accounting period data. NALCOMIS is a dedicated automatic data processing (ADP) system and precludes the use of DCFs. Refer to the *NALCOMLS User's Manual* for processing requirements.

LOCAL DATA BASE CORRECTION PROCEDURES

To ensure that your Maintenance Data System (MDS) reports reflect accurate information, you will need to make corrections to MDS source documents that are in error. To discuss every correction procedure for MDS source documents in this chapter would be impossible, but we will discuss the basic correction procedures. For more information concerning local data base correction procedures, you should refer to the latest edition of OPNAVINST 4790.2. Those activities using NALCOMIS refer to the *NALCOMIS User's Manual* for specific details of local data base correction procedures.

Reporting activities will submit source documents daily to their DSF for processing. The DSF will enter data from source documents and produce daily audit reports (DARs). If problems are encountered during the data entry, the DSF circles the data element in red that cannot be

entered; for example, blanks, excessive characters, or illegible entries. The source document is then returned to the submitting activity for correction and resubmission. To the maximum extent possible, local inputs and data base errors should be corrected daily, as they are identified.

Data elements on the record part I or part II of the DAR that are found to be in error will be lined out with a single red line. The correct data will be handscribed immediately above the lined out entry and "C" entered under the Correction Code (CC) column on the far right side of the record to be corrected. If the data to be corrected is in the VIDS/MAF A-Z record, "C" will be entered immediately to the left of the letter prefix of the VID/MAF record requiring correction.

If a whole record/source document is to be deleted, a "D" will be recorded directly under the CC column on the far right side of the record or immediately to the left of the letter prefix in the

OPNAVINST 4790.2D

DOCUMENT CONTROL FORM

1. ORGANIZATION

2. JULIAN DATE

3. AWAY FROM HOME CODE

4. SUPPLY ORGANIZATION CODE

CARDS/FORMS BY TYPE	FORMS COUNT 1	FORMS COUNT 2	FORM REJECT
5. MDR FORMS			
a. SUPPORT ACTION FORM			
b. VIDS MAF (COPY 1)			
c. SAF REPLENISHMENT			
d. VIDS/MAF (CLOSEOUT)			
e. METER CARD (GREEN COPY)			
f. METER CARD (GREEN COPY) (CLOSEOUT)			
6. TRAINING DEVICE FORMS			
a. UTILIZATION			
7. FLIGHT DATA FORMS			
a. NAVAL AIRCRAFT FLIGHT RECORD			
8. MATERIAL REPORTING			
a. VIDS MAF (COPY 2)			
b. DD 1348			

CARDS/FORMS BY TYPE	FORMS COUNT 1	FORMS COUNT 2	FORM REJECT
9. LOCAL CONTROL			
a. DAILY AUDIT PART I			
b. DAILY AUDIT PART II			
c. DAILY AUDIT PART III			

10. COMMENTS / LOCAL USE

11. JULIAN DATE / TIME RECEIVED

12. RECEIVED BY *(Signature)*

OPNAV 4790/45 (REV 2-86) PREVIOUS EDITIONS MAY BE USED UNTIL SUPPLY IS EXHAUSTED S/N 0107-LF-047-9229

Figure 5-12.-Document Control Form (DCF) (OPNAV 4790/45).

case of the VIDS/MAF copy 1 or METER card (green copy) A-Z records.

MAINTENANCE DATA SYSTEM (MDS) REPORTS

Within the Maintenance Data System (MDS), large amounts of readiness and maintenance data are generated at the local level. This data consists of coded elements that are summarized in daily and monthly reports. The description, content and use of the MDS reports prepared by the DSF and used by the data analyst (at the organizational level) are discussed in this section of the TRAMAN. NAVFLIRS reports were previously discussed in chapter 4 and will not be discussed in this chapter. Those activities using NALCOMIS should refer to *NALCOMIS User's Manual* for information concerning the Maintenance Data System (MDS).

VIDS/MAF COPY 1 DAILY AUDIT REPORT (DAR)

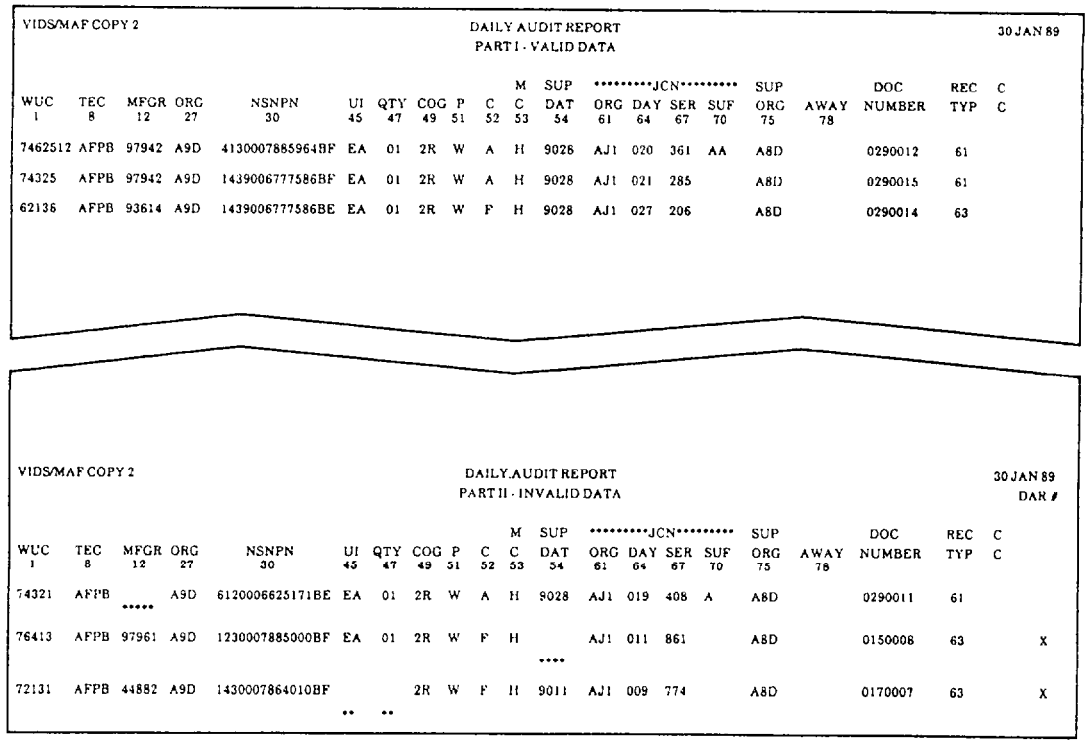
This report is prepared from data submitted on copy 1 of the VIDS/MAF and is printed in three parts. Part I contains data that has no errors and is considered valid. Part II contains records submitted during the current reporting period which contain errors that have not been corrected. Part III will be printed if there are any correction/deletion records which cannot be applied to the local data base due to erroneous data. The work center supervisor should verify the daily audit report (fig. 5-1 3) to ensure that all data contained on the work centers VIDS/MAFs have been correctly key punched by the DSF.

MONTHLY PRODUCTION REPORT (MDR-2)

This report lists all maintenance actions in work center sequence including technical directive compliance and data entered in the (H-Z) Failed/Required Material block of the VIDS/ MAF (fig. 5-14). It also provides the work center supervisor with statistical data pertaining to the work center; for example, man-hours expended to repair a subsystem.

JOB CONTROL NUMBER (JCN) CONSOLIDATION REPORT (MDR-3)

This report is a consolidated list, by organization, of all maintenance and technical directive compliance actions submitted during the month by the parent organization and the supporting activity. This report is prepared from data submitted on the VIDS/MAF copy 1 for all transaction codes except 00, 02, and 03 (fig. 5-15).



VIDS/MAF COPY 2 — DAILY AUDIT REPORT — PART I - VALID DATA — 30 JAN 89

WUC 1	TEC 8	MFGR 12	ORG 27	NSNPN 30	UI 45	QTY 47	COG 49	P 51	C 52	M C 53	SUP DAT 54	JCN ORG 61	JCN DAY 64	JCN SER 67	JCN SUF 70	SUP ORG 75	AWAY 78	DOC NUMBER	REC TYP	C C
7462512	AFPB	97942	A9D	4130007885964BF	EA	01	2R	W	A	H	9026	AJ1	020	361	AA	A8D		0290012	61	
74325	AFPB	97942	A9D	1439006777586BF	EA	01	2R	W	A	H	9028	AJ1	021	285		A8D		0290015	61	
62136	AFPB	93614	A9D	1439006777586BE	EA	01	2R	W	F	H	9028	AJ1	027	206		A8D		0290014	63	

VIDS/MAF COPY 2 — DAILY AUDIT REPORT — PART II - INVALID DATA — 30 JAN 89 — DAR #

WUC 1	TEC 8	MFGR 12	ORG 27	NSNPN 30	UI 45	QTY 47	COG 49	P 51	C 52	M C 53	SUP DAT 54	JCN ORG 61	JCN DAY 64	JCN SER 67	JCN SUF 70	SUP ORG 75	AWAY 78	DOC NUMBER	REC TYP	C C	
74321	AFPB	*****	A9D	6120006625171BE	EA	01	2R	W	A	H	9028	AJ1	019	408	A	A8D		0290011	61		
76413	AFPB	97961	A9D	1230007885000BF	EA	01	2R	W	F	H	****	AJ1	011	861		A8D		0150008	63		X
72131	AFPB	44882	A9D	1430007864010BF	**	**	2R	W	F	H	9011	AJ1	009	774		A8D		0170007	63		X

Figure 5-13.-VIDS/MAF Copy 1 Daily Audit Report.

MDR-2 MONTHLY PRODUCTION REPORT JAN 89

ORG: AC3

	Action Organization	Work Center	Type Equipment Code	Work Unit Code	Position	Action Taken	Malfunction	Fault Isolation Detection	When Discovered	Items Processed	Man-hours	Elapsed Maintenance Time	Bureau/Serial Number	Type Maintenance	Job Control Number	Date	Part Number/ Technical Directive Compliance	Action Taken Failed Parts	Malfunction Failed Parts	Quantity	Transaction Code
	ORG	WC	TEC	WUC	POS	AT	MAL	FID	WD	IP	MHRS	EMT	BUNO	TM	JCN	DATE	PART/TDC	AT	MALF	QTY	TR
(1)	AC3	X20	AAEA	010						1	4.0		151687	A		9008					01
(2)	AC3	X20	AAEA	010						1	2.5		151688	A		9009					01
(3)	SUBSYSTEM TOTAL									2	6.5										
(4)	AC3	X20	AAEA	045						1	6.0		151688	A		9018					01
(5)	AC3	X20	AAEA	045						1	3.5		151689	A		9028					01
(6)	SUBSYSTEM TOTAL									2	9.5										
(7)									**	4	16.0										
(8)	AC3	X20	AAEA	42211		C	105		J	1	1.5	1.5	151687	D	AC3022699	9022					11
(9)																	MS9046A	R	020	2	12
(10)	AC3	X20	AAEA	42211		R	255		H	1	3.0	1.5	151687	B	AC3022235	9022					23
(11)	AC3	X20	AAEA	42211		T	814		O	1	1.0	1.0	151683	B	AC3022083	9022					18
(12)	AC3	X20	AAEA	42211		S	800		O	1	1.0	1.0	151683	B	AC3022085	9024					11
(13)	SUBSYSTEM TOTAL									4	6.5										
(14)	AC3	X20	AAEA	46132		C				1	8.5	4.0	151683		AC3022423	9023	1740096	00			41
(15)	SUBSYSTEM TOTAL									1	8.5										
(16)									**	5	15.0										
(17)	TEC TOTAL									9	31.0										
(18)	WC TOTAL									9	61.0										
(19)	WD TOTAL	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
(20)									1	1					2										
(21)															***	87	981.7								
(22)	ORG SUPPORT ACTION TOTAL TEC														01	02	03	04	05	06	07	08	09		
(23)															AAEA			6.5							

Figure 5-14.-Monthly Production Report (MDR-2).

MDR-3 JOB CONTROL NUMBER CONSOLIDATION REPORT JAN 89

JCNORG: AC3

	Job Control Number	Type Maintenance	Type Equipment Code	Bureau Number	Work Unit Code	Position	Action Taken	When Discovered	Malfunction Code	Fault Isolation Detection	Quantity/Items Processed	Man-hours	Elapsed Maintenance Time	Manufacturer's Code	Part Number/Serial Number/Technical Directives Compliance Identification	Action Organization	Work Center	Date	Scheduling Processing		Total Turn Around Time Awaiting Parts Repair			Transaction Code
	JCN	T M	TEC	BUNO	WUC	POS	A T	W D	MAL	FID	QTY/ IP	MHRS	EMT	MFGR	PART/SER/TDC	ORG	WC	DATE	P	S	R	A	T	TR
(1)	AC3008015	S	AAEA	151633	030		0	O	000		1	.0	.0			AC3	X20	9008						11
(2)	AC3010235	B	AAEA	151686	29313		C	D	020		1	2.5	2.5			AC3	X10	9010						12
(3)							R		020		1			26512	12468H									
(4)	AC3010309	B	AAEA	151689	73632		R	D	290		1	6.0	3.0			AC3	X60	9010						23
(5)	AC3010309	B	AAEA	151689	73632		C	D	290		1	8.0	4.0			A90	X50	9012						32
(6)							R		450		1			06481	5A3									
(7)															AAM025				0	0	2	1	2	
(8)										*	4	16.5	9.5											
(9)										**	4	16.5	9.5											

Figure 5-15.-Job Control Number Consolidation Report (MDR-3).

It is designed so the maintenance officer will have a record of maintenance performed on the equipment for which the maintenance officer is responsible.

TECHNICAL DIRECTIVE COMPLIANCE REPORT (MDR 4-1)

This report gives a detailed list, by organization, of technical directive compliance during the reporting period. It is designed for the maintenance control officer as an aid in scheduling and maintaining positive control of technical directive compliance actions (fig. 5-16).

MAINTENANCE ACTION BY BUREAU/SERIAL NUMBER REPORT (MDR-5)

This report consolidates all maintenance actions in bureau/serial sequence including support equipment, technical directive compliance, and component repair at the IMA. This report is designed to provide a history of maintenance actions by bureau/serial number and is intended for organizational and intermediate level managers, analysts and maintenance officers (fig. 5-17).

MAINTENANCE ACTION BY SYSTEM AND COMPONENT REPORT (MDR-6)

This report consolidates all maintenance actions by component, including technical directive compliance. It can be used to identify troublesome systems or components within systems which are indicated by a large number of maintenance actions or excessive man-hours expended for that system or component. The report is prepared and provided to the maintenance officer (fig. 5-18).

MDR-4-1 TECHNICAL DIRECTIVE COMPLIANCE REPORT JAN 89

JCNORG: AC3

	Bureau Serial Number	Type Equipment Code	Interim Directive Code	Directive Number	Revision	Amendment	Part/Kit	Work Unit Code	Status Code	Items Processed Organizational	Man-hours Organizational	Items Processed Intermediate	Man-hours Intermediate	Elapsed Maintenance Time	Maintenance Level	Action Date	Action Organization	Work Center	Job Control Number	Transaction Code
	BUNO	TEC	INT	TDC				WUC	SC	IPO	MHRSO	IPI	MHRSI	EMT	ML	DATE	ORG	WC	JCN	TR
(1)	151688	AAEA	50	0047			01	13300	C	1	6.0			3.0	1	9015	AC3	120	AC3 015 061	47
(2)	151688	AAEA	50	0047			01	13162	A		2.0			2.0	1	9015	AC3	210	AC3 015 061	47
(3)									*	1	8.0			5.0						
(4)	151688	AAEA	54	0046	A	1	00	64485	C	1	13.0			6.0	1	9015	AC3	220	AC3 014 112	41
(5)									*	1	13.0			6.0						
(6)	151688	AAEA	54	0046	A	2	01	64485	D	1	.5			.5	1	9015	AC3	220	AC3 014 113	41
(7)									*	1	.5			.5						
(8)									**	3	21.5			11.5						
(9)	151689	AAEA	50	0047			01	13000	C	1	8.0			4.0	1	9025	AC3	120	AC3 015 060	47
(10)	151689	AAEA	50	0047			01	13162	A		3.0			3.0	1	9025	AC3	210	AC3 015 060	47
(11)									*	1	11.0			7.0						
(12)	151689	AAEA	54	0046	A	1	00	64485	D	1	.5			.5	1	9025	AC3	220	AC3 014 111	41
(13)									*	1	.5			.5						
(14)	151689	AAEA	54	0046	A	2	01	64485	C	1	5.0			5.0	1	9025	AC3	220	AC3 014 110	41
(15)									*	1	5.0			5.0						
(16)									**	3	16.5			12.5						
(17)	151690	AAEA	66	0135			01	96A10	C			1	2.5	2.5	2	9025	A98	820	AC3 016 006	47
(18)									*			1	2.5	2.5						
(19)									**			1	2.5	2.5						
(20)									***	6	38.0	1	2.5	26.5						

Figure 5-16.-Technical Directive Compliance Report (MDR 4-1).

MDR-5 MAINTENANCE ACTION BY BUREAU/SERIAL NUMBER REPORT JAN 89

JCNORG: AT1

	Type Equipment Code	Bureau/Serial Number	Type Maintenance	Work Unit Code	Manufacturers Code	Position	When Discovered	Action Taken	Malfunction	Fault Isolation Detection	Organization	Work Center	Items Processed Organizational	Man-hours Organizational	Elapsed Maintenance Time Organizational	Items Processed Intermediate	Man-hours Intermediate	Elapsed Maintenance Time Intermediate	Job Control Number	Date	Part Number/Technical Directive Compliance Code	Transaction Code
	TEC	BUNO	TM	WUC	MFGR	POS	WD	AT	MAL	FID	ORG	WC	IPO	MHRSO	EMTO	IPI	MHRSI	EMTI	JCN	DATE	PART/TDC	TR
(1)	APBD	161011	B	4214100			D	A	799		AT1	X20	1	3.5	3.5				AT1008127	9008		11
(2)	APBD	161011	B	4214120	96906		A	C	127		A9C	X20				1	4.0	2.0	AT1009131	9010	MS34721-14	31
(3)	APBD	161011	B	4214120	96906		A	R	615		AT1	X20	1	7.4	3.7				AT1009131	9009	MS34721-14	23
(4)	SUBSYSTEM TOTAL												2	10.9	7.2	1	4.0	2.0				
(5)	APBD	161011	B	42153			D	A	799		AT1	X20	1	5.2	2.6				AT1023110	9023		11
(6)	APBD	161011	B	42153			D	C	615		AT1	X20	1	2.5	2.5				AT1027142	9028		12
(7)	SUBSYSTEM TOTAL												2	7.7	5.1							
(8)	APBD	161011	B	42172	47315		A	C	615		A9C	X20				1	12.2	5.0	AT1015123	9017	223176	31
(9)	APBD	161011	B	4217K			D	C	127		AT1	X10	1	1.0	1.0				AT1016124	9016		11
(10)	APBD	161011	B	42172	47315		A	R	615		AT1	X20	1	3.0	1.5				AT1015123	9015	223176	23
(11)	SUBSYSTEM TOTAL												2	4.0	2.5	1	12.2	5.0				
(12)	TM TOTAL												6	22.6	14.8	2	16.2	7.0				
(13)	BUNO TOTAL												6	22.6	14.8	2	16.2	7.0				
(14)	WD TOTAL	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
(15)		2			4																					
(16)	TEC TOTAL												6	22.6	14.8	2	16.2	7.0				
(17)	ORG TOTAL												6	22.6	14.8	2	16.2	7.0				
(18)	NO DEFECTS TOTAL				ORG TOTAL		2		ORG PERCENT				33.3		INT TOTAL		0		INT PERCENT		.0	

Figure 5-17.-Maintenance Action By Bureau/Serial Number Report (MDR-5)

MDR-6 MAINTENANCE ACTION BY SYSTEM AND COMPONENT REPORT JAN 89

ORG: AT1

	Work Unit Code	Position	Type Equipment Code	Bureau/Serial Number	Action Taken	Malfunction	Fault Isolation Detection	When Discovered	Type Maintenance	Items Processed	Man-hours	Elapsed Maintenance Time	Job Control Number	Completion Date	Manufacturer's Code	Part Number/Technical Directive Compliance Code	Work Center	Transaction Code
	WUC	POS	TEC	BUNO	AT	MAL	FID	WD	TM	IP	MHRS	EMT	JCN	DATE	MFGR	PART/TDC	WC	TR
(1)	011		APBD						A	215	289.3						X10	91
(2)	COMPONENT TOTAL									215	289.3							
(3)	031		APBD						C	120	142.5						X10	01
(4)	032		APBD						D	92	118.7						X10	01
(5)	COMPONENT TOTAL									212	261.2							
(6)	SUBSYSTEM TOTAL									427	550.5							
(7)	AT TOTAL	A	B	C	E	J	K	L	N	P	Q	R	S	T	Y	Z	0	
(8)	TEC TOTAL									427	550.5							
(9)	4231100		APBD	161011	A	799		D	B	1	1.3	1.3	AT1004121	9004			X20	11
(10)	4231100		APBD	161012	C	127		D	B	1	1.0	.5	AT1010276	9011			X20	11
(11)	4231100		APBD	161013	R	374		B	B	1	4.4	2.2	AT1023317	9024	96906	MS24213-Q42	X20	23
(12)	COMPONENT TOTAL									3	6.7	4.0						
(13)	4231210		APBD	161005	A	127		D	B	1	4.8	2.4	AT1007537	9008			X20	11
(14)	4231210		APBD	161010	C	070		J	D	1	3.6	1.2	AT1027426	9027			X20	11
(15)	COMPONENT TOTAL									2	8.4	3.6						
(16)	SUBSYSTEM TOTAL									5	15.1	7.6	MH/IP - 3.0					
(17)	AT TOTAL	A	B	C	E	J	K	L	N	P	Q	R	S	T	Y	Z	0	
(18)		2		2								1						
(19)	42810		APBD	161007	C	615			M	G		1	6.6	3.3	AT1018A08	9018		X20	11
(20)	COMPONENT TOTAL											1	6.6	3.3					
(21)	SUBSYSTEM TOTAL											1	6.6	3.3	MH/IP - 6.6				
(22)	AT TOTAL	A	B	C	E	J	K	L	N	P	Q	R	S	T	Y	Z	0		
(23)				1															
(24)	TEC TOTAL												6	21.7	10.9				
(25)	WD TOTAL	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
(26)			1		3					1			1												

Figure 5-18.-Maintenance Action by System and Component Report (MDR-6).

COMPONENT REPAIR/BEYOND CAPABILITY OF MAINTENANCE (BCM) REPORT (MDR-7)

This report provides a spread of action taken codes for maintenance actions taken by the intermediate level and provides the maintenance officer and the maintenance/material control officer with an overview of the entire production effort of the activity by work center and work unit code within a type equipment (fig. 5-19). The report can be used to determine the percentage of components received at the intermediate maintenance activity (IMA) that do not require any repair.

FAILED PARTS/PARTS REQUIRED REPORT (MDR-8)

This report is prepared from data submitted on the VIDS/MAF with transaction code 12 or 32 and a malfunction code (not 000) entered in the (H-Z) Failed/Required Material block (fig. 5-20). This report is intended for the maintenance officer, material control officer, and work center supervisors. The report can be used to identify part numbers that have a high awaiting parts (AWP) time.

REPAIR CYCLE DATA REPORT (MDR-9)

This monthly report is a detailed list, by organization, showing the number of days of turnaround time and the elements that compose the turnaround time for each repairable component processed through the intermediate maintenance activity as documented on the VIDS/MAF, or Metrology Equipment Recall (METER) card (fig. 5-21). This report can be used to identify components that appear repeatedly in the intermediate level repair cycle.

MDR-7 COMPONENT REPAIR/BEYOND CAPABILITY OF MAINTENANCE REPORT JAN 89

ORG: A9F

	Action Organization	Job Control Number	Work Center	Work Unit Code	Position	Type Equipment Code	Manufacturer's Code	Part Number	Total Items Not Repaired												Total Items Repaired	Other Codes	Total Items Processed	Total Man-hours	Total EMT
	ORG	JCNORG	WC	WUC	POS	TEC	MFGR	PART	1	2	3	4	5	6	7	8	9	BCM	A	B	C	J	K	Z	RPR	OTH	TOT	MH	EMT
(1)	A9F	AT1	431	3251366		APBD	94585	TF3400-4													1				1		1	2	1
(2)				WUC/TEC/JCNORG TOTAL																	1				1		1	2	1
(3)	A9F	AT3	431	325136C		APBD	54112	390897-2	1									1									1	4	2
(4)				WUC/TEC/JCNORG TOTAL					1									1									1	4	2
(5)	A9F	AT5	431	3251200		APBC	54331	4418-31													1				1		1	1	1
(6)	A9F	AT5	431	3251200		APBC	54331	4418-32													3				3		3	5	4
(7)	A9F	AT5	431	3251200		APBC	54331	4418-33A													1				1		1	1	1
(8)				WUC/TEC/JCNORG TOTAL																	5				5		5	7	6
(9)	A9F	AT5	431	3251200		APBD	54331	4418-33A				1					1	2	1		2				3		5	14	10
(10)				WUC/TEC/JCNORG TOTAL								1					1	2	1		2				3		5	14	10
(11)						WC TOTAL			1			1					1	3	1		8				9		12	27	19
(12)						DIVISION TOTAL			1			1					1	3	1		8				9		12	27	19
(13)						ORGANIZATION TOTAL			1			1					1	3	1		8				9		12	27	19

Figure 5-19.-Component Repair/Beyond Capability of Maintenance (BCM) Report (MDR-7).

MDR-8 FAILED PARTS/PARTS REQUIRED REPORT JAN 89

ORG: A9D

	Action Organization	Work Center	Work Unit Code	Position	Type Equipment Code	Type Maintenance	Action Taken	Malfunction	When Discovered	Bureau/Serial Number	Part Number	Manufacturer's Code	Reference Symbol	Quantity	Job Control Number	Completion Date	Priority	Date Ordered	Requisition Number	Date Received	Awaiting Parts Indicator: Failed Parts	Awaiting Parts Indicator: AWP	Transaction Code
	ORG	WC	WUC	POS	TEC	TM	AT	MAL	WD	BUNO	PART	MFCR	REFSYM	QTY	JCN	DATE	PRI	DATE ORD	REQN	DATE RECD	F P	A W	TR
(1)	A9D	650	7363100		AAEA	B	R	649	D	141687	3537A-0	82227	527	1	AC3007626	9008	03	9007	G973	9007	1		32
(2)	A9D	650	7363100		AAEC	B	R	561	H	151776	3537A-0	82227	527	1	AB3020622	9029	03	9021	G735	9029	1	1	32
(3)													PART TOTAL	2									
(4)	A9D	650	7363200		AAEA	B	R	450	D	151687	866542	49671	523	1	AC3004763	9008	03	9005	G974	9007	1	1	32
(5)	A9D	650	7363200		AAEA	G	R	450	M	151689	866542	49671	523	1	AC3010A17	9029	03	9010	G988	9028	1	1	32
(6)	A9D	650	7363200		AAEC	B	4	602	E	151778	866542	49671	523	1	AC3023844	9030	03	9029	G910	9029	1	1	32
(7)													PART TOTAL	3									
(8)	A9D	650	73X2P00		AAEA	B	R	958	D	151776	866554	29146	381	1	AC3006612	9029	03	9006	G975	9028	1	1	32
(9)	A9D	650	73X2P00		AAEA	B	R	064	H	151778	866554	29146	381	1	AC3010819	9018	03	9011	G990	9011	1		32
(10)	A9D	650	73X2P00		AAEC	B	R	450	D	151834	866554	29146	381	1	AC3019436	9028	03	9019	G907	9027	1	1	32
(11)	A9D	650	73X2P00		AAEC	Q	R	602	N	151879	866554	29146	381	1	AB3022B20	9027	03	9022	G744	9026	1	1	32
(12)													PART TOTAL	4									
(13)	A9D	650	73X4C10		AAEA	B	R	450	D	151776	869993	72726	734	1	AC3019437	9028	03	9019	G908	9027	1	1	32
(14)	A9D	650	73X4C10		AAEC	B	R	561	D	151778	869993	72726	734	1	AB3022921	9027	03	9022	G745	9026	1	1	32
(15)													PART TOTAL	2									

Figure 5-20.-Failed Parts/Parts Required Report (MDR-8).

MDR-9 REPAIR CYCLE DATA REPORT JAN 89

ORG: A9D

	Action Organization	Work Center	Part Number	Type Equipment Code	Component Serial Number	Job Control Number	Work Unit Code	Malfunction Code	Items Processed	Action Taken	Transaction Code	Elapsed Maintenance Time	Man-hours	Processing	Scheduling	Repair	Awaiting Parts	In Work	IMA TAT	Total Turnaround Time	Completion Date
	ORG	WC	PART	TEC	SER	JCN	WUC	MAL	IP	AT	TR	EMT	MHRS	PRO	SCH	REP	AWP	WORK	IMA	TOT	DATE
	A9D	610	1267	AAEA	1063	AC3003022	7236400	127	1	C	31	8.4	16.8	3		1		1	1	4	9008
	A9D	610	1267	AAEA	2276A	AC3003214	7236400	255	1	C	32	4.4	13.2	1		1	1	2	2	3	9008
	A9D	610	1267	AAEA	4322	AC3004110	7236400	962	1	C	32	1.8	5.4		1	1		1	2	2	9009
	TEC TOTAL								3			14.6	35.4	4	1	3	1	4	5	9	
	TEC AVERAGE													1.3	.3	1.0	.3	1.3	1.7	3.0	
	A9D	610	1267	AAEC	78	AC3003021	7236400	806	1	A	31	1.1	2.2			1		1	1	1	9007
	A9D	610	1267	AAEC	965A	AC3004421	7236400	127	1	C	32	1.7	5.1			1		1	1	1	9012
	TEC TOTAL								2			2.8	7.3			2		2	2		
	TEC AVERAGE													.0	.0	1.0	.0	1.0	1.0	1.0	
	PART NUMBER TOTAL								5			17.4	42.7	4	1	5	1	6	7	1	
	PART NUMBER AVERAGE													.8	.2	1.0	.2	1.2	1.4	2.2	
	WORK CENTER TOTAL								5			17.4	42.7	4	1	5	1	6	7	11	
	WORK CENTER AVERAGE													.8	.2	1.0	.2	1.2	1.4	2.2	
	ORG TOTAL								3064			734.5	11466.4	3370	2451	4289	7660	11949	14400	17770	
	ORG AVERAGE													1.1	.8	1.4	2.5	3.9	4.7	5.8	

TOTAL TIME IN DAYS	0-3		4-10		11-20		21-30		31-60		61-90		91-120		121-150		OVER 150	
	RFI	BCM	RFI	BCM	RFI	BCM	RFI	BCM	RFI	BCM	RFI	BCM	RFI	BCM	RFI	BCM	RFI	BCM
	1265	616	317	140	230	83	61	51	108	58	48	23	15	8	13	1	18	9

Figure 5-21.-Repair Cycle Data Report (MDR-9).

FOREIGN OBJECT DAMAGE (FOD) REPORT (MDR-10)

This report is used to measure the maintenance effort attributable to FOD. Components replaced, repaired, condemned, etc., can be identified by the data in the MDR file. Indirectly, the report reflects housekeeping conditions (cleanliness of ramps, runways, hangar area, etc.) or the maintenance methods of personnel (adherence to proper maintenance practices (fig 5-22). The source of data for this report is the VIDS/MAF (excluding transaction code 72), which contains malfunction code 301.

CORROSION CONTROL/TREATMENT REPORT (MDR-11)

This report is designed for monitoring the Corrosion Control Program or for investigating the amount of corrective corrosion treatment necessary (fig. 5-23). Support action code 04 and malfunction code 170 are the two sources of information that are used to identify these areas. It is a simple matter to determine whether any specific portion of the aircraft, by work unit code, needs a better corrosion control program. This report is subject to change due to the deletion of the Support Action Form (SAF).

NO DEFECT REPORT (MDR-12)

This report shows the amount of time and effort expended on maintenance for which there is no malfunction (fig. 5-24). This report can be used to determine man-hours expended in removing or installing items with no known malfunction, solely to facilitate other maintenance.

WHEN MALFUNCTION WAS DISCOVERED REPORT (MDR-13)

This report shows the action taken by category of each when discovered code

MDR-10 FOREIGN OBJECT DAMAGE REPORT JAN 89

ORG: AC3

	Work Unit Code	Position	Type Equipment Code	Bureau/Serial Number	When Discovered	Type Maintenance	Action Taken	Malfunction	Fault Isolation Detection	Items Processed	Man-hours	Manufacturers Code	Part Number	Reference Symbol	Job Control Number	Action Organization	Work Center	Completion Date	Transaction Code
	WUC	POS	TEC	BUNO	WD	TM	AT	MAL	FID	IP	MHRS	MFGR	PART NUMBER	REFSYM	JCN	ORG	WC	DATE	TR
(1)	11421		AAEA	151687	E	B	R	301		1	4.5	26512	128H100555		AC3022622	AC3	120	9022	23
(2)	11421		AAEA	151687	E	B	C	301		1	12.0	26512	128H100555		AC3022622	A9D	540	9023	32
(3)							R	301				26512	128H41	215					
(4)	14814		AAEA	151688	E	B	C	301		1	2.5				AC3022629	AC3	120	9022	11
(5)	23500		AAEA	151689	J	B	C	301		1	5.0				AC3024024	AC3	110	9024	12
(6)							0	000				JHHA1	673498 E1425						
(7)	23500		AAEA	151689	C	B	R	301		1	16.0	JHHA1			AC3025123	AC3	110	9026	23
(8)	23500		AAEA	151689	C	B	C	301		1	122.0	JHHA1			AC3025123	A9D	410	9026	32
(9)							R	301				73481	135HA10						
(10)	2358100		AAEA	151690	J	B	R	301		1	2.0	77224	184A150		AC3025127	AC3	110	9026	25
(11)								000				JHHA1	673473 E0258						
(12)	2358100		AAEA	151690	J	B	C	301		1	10.0	77224	184A150		AC3025127	A9D	410	9026	32
(13)							R	301				77224	184A150-1						
(14)									*	8	174.0								
(15)									**	8	174.0								

Figure 5-22.-Foreign Object Damage Report (MDR-10).

MDR-11 CORROSION CONTROL/TREATMENT REPORT MAY 89

ORG: AC3

	Work Unit Code	Position	Type Equipment Code	Bureau/Serial Number	When Discovered	Type Maintenance	Action Taken	Malfunction	Fault Isolation Detection	Items Processed	Man-hours	Elapsed Maintenance Time	Maintenance Level	Completion Date	Manufacturers Code	Part Number	Action Organization	Work Center	Job Control Number	Transaction Code
	WUC	POS	TEC	BUNO	WD	TM	AT	MAL	FID	IP	MHRS	EMT	ML	DATE	MFGR	PART NUMBER	ORG	WC	JCN	TR
(1)	040		AAEA	151692		A				23	61.5		1				AC3	X10		01
(2)	041		AAEA	151692		A				21	15.0		1				AC3	X2A		01
(3)	045		AAEA	151692		A				6	5.0		1				AC3	X60		01
(4)	048		AAEA	151692		A				8	10.0		1				AC3	X3A		01
(5)	049		AAEA	151692		A				2	6.0		1				AC3	X10		01
(6)									*	60	97.5									
(7)	1111C		AAEA	151692	F	B	Z	170		2	4.0	4.0	1	9122			AC3	X2A	AC3122636	11
(8)	1111C		AAEA	151692	J	D	Z	170		1	1.0	1.0	1	9122			AC3	X2A	AC3122011	11
(9)	1111C		AAEA	151692	M	G	Z	170		1	1.0	1.0	1	9122			AC3	X2C	AC3122A30	11
(10)									*	4	6.0	6.0								
(11)	11930		AAEA	151692	J	D	Z	170		1	3.5	3.5	1	9122			AC3	X20	AC3122012	11
(12)									*	1	3.5	3.5								
(13)	11221		AAEA	151692	F	B	Z	170		1	2.0	2.0	1	9122			AC3	X10	AC3122637	11
(14)	11221		AAEA	151692	R	B	Z	170		1	1.5	.9	1	9122			AC3	X10	AC3122009	11
(15)									*	2	3.5	2.9								
(16)	2951C		AAEA	151692	J	D	Z	170		1	3.0	1.5	1	9122			AC3	X10	AC3122265	11
(17)	2951C		AAEA	151692	J	D	Z	170		1	3.0	3.0	1	9122			AC3	X10	AC3122061	11
(18)									*	2	6.0	4.5								
(19)									**	69	116.5	16.9								
(20)									***	69	116.5	16.9								

Figure 5-23.-Corrosion Control/Treatment Report (MDR-11).

MDR-12 NO DEFECT REPORT JAN 89

ORG: AC3

	Work Unit Code	Position	Type Equipment Code	Bureau/Serial Number	When Discovered	Type Maintenance	Action Taken	Malfunction	Fault Isolation Detection	Items Processed	Man-hours	Elapsed Maintenance Time	Maintenance Level	Completion Date	Manufacturer's Code	Part Number	Serial Number	Work Center	Job Control Number	Transaction Code
	WUC	POS	TEC	BUNO	WD	TM	AT	MAL	FID	IP	MHRS	EMT	ML	DATE	MFGR	PART NUMBER	SERIAL	WC	JCN	TR
(1)	11910		AAEA	151687	E	B	A	799		1	1.5	1.5	1	9022				X20	AC3022431	11
(2)	11A10		AAEA	151687	E	B	A	799		1	.5	.5	1	9022				X20	AC3022435	11
(3)	11A21		AAEA	151685	J	D	A	799		1	1.0	1.0	1	9022				X20	AC3022102	11
(4)									*	3	3.0	3.0								
(5)	29310		AAEA	151689	J	D	A	799		1	1.0	1.0	1	9022				X10	AC3022112	11
(6)	29620		AAEA	151687	B	B	A	799		1	.5	.5	1	9022				X10	AC3022361	11
(7)									*	2	1.5	1.5								
(8)									**	5	4.5	4.5								
(9)	1122110		AAEA	151686	O	B	S	800		1	3.0	1.5	1	9022				X30	AC3022023	11
(10)									*	1	3.0	1.5								
(11)									**	1	3.0	1.5								
(12)	12110		AAEA	151698	O	B	S	804		1	3.5	1.5	1	9022				X30	AC3022315	11
(13)									*	1	3.5	1.5								
(14)									**	1	3.5	1.5								
(15)	51114		AAEA	151686	O	B	T	814		1	1.0	1.0	1	9022	06275	A2165	193742	X20	AC3022019	18
(16)	51114		AAEA	151686	O	B	T	814		1	1.0	1.0	1	9022	82430	18744	BAH1990	X20	AC3022020	18
(17)									*	2	2.0	2.0								
(18)									**	2	2.0	2.0								
(19)									***	9	13.0	9.5								

Figure 5-24.-No Defect Report (MDR-12).

(fig. 5-25). This report is prepared from data submitted on the METER card and the VIDS/MAF, excluding transaction codes 00, 02, 03 and 72. This report is intended for use by the maintenance officer. The report can be used to determine how many abort malfunctions were caused by mechanical failures, what caused them, whether these malfunctions were discovered before flight or while in flight, and whether they could have been eliminated by better inspections of the aircraft.

MONTHLY EQUIPMENT DISCREPANCY AND UTILIZATION REPORT (SCIR-3)

This report is designed to show, by bureau/serial number, the total number of discrepancy hours that limited the equipment from performing its assigned mission or function during the reporting period (fig. 5-26). The report is designed for the maintenance officer and may be used to determine the impact of maintenance/supply on the mission capability of the equipment. Equipment in/out of service hours, flight hours, and number of flights are also shown.

MONTHLY EQUIPMENT CAPABILITY REPORT (SCIR-4)

This report is designed to reflect equipment capability to perform its assigned mission/function during a reporting period (fig. 5-27). This report is prepared from VIDS/MAF documents that have a valid equipment operational capability (EOC) code documented in the Repair Cycle or Maintenance/Supply Record. This report reflects percent of mission capability of equipment by bureau/serial number and overall totals for that type of equipment.

MONTHLY EQUIPMENT MISSION CAPABILITY SUMMARY REPORT (SCIR-5-1)

This report is designed to display SCIR hours by mission category and awaiting maintenance

MDR-13 WHEN MALFUNCTION WAS DISCOVERED REPORT JAN 89

ORG: AC3

	Type Equipment Code	When Discovered	Work Unit Code	Position	Action Taken	Malfunction Description	Fault Isolation Detection	Job Control Number Organization	Action Organization		Items Processed	Man-hours	Elapsed Maintenance Time
	TEC	WD	WUC	POS	AT	MAL	FID	JCNORG	ACTORG		IP	MHRS	EMT
(1)	AAEA	B	76931		R	561		AC3	AC3		2	1.0	1.0
(2)	AAEA	B	76931		C	127		AC3	AC3		5	5.0	5.0
(3)										**	7	6.0	6.0
(4)	A B C J K L N P Q R S T Y Z 0												
(5)		5			2					***	7	6.0	6.0
(6)	AAEA	D	29313		C	167		AC3	AC3		1	4.0	2.0
(7)	AAEA	D	29313		R	020		AC3	AC3		1	6.0	3.0
(8)										**	2	10.0	5.0
(9)	AAEA	D	41171		R	167		AC3	AC3		1	6.0	3.0
(10)										**	1	6.0	3.0
(11)	AAEA	D	46634		B	105		AC3	AC3		3	2.5	2.5
(12)	AAEA	D	46634		C	070		AC3	AC3		1	.5	.5
(13)										**	4	3.0	3.0
(14)	AAEA	D	72361		R	383		AC3	AC3		2	1.5	1.5
(15)										**	2	1.5	1.5
(16)	AAEA	D	73364		R	383		AC3	AC3		2	1.5	1.5
(17)										**	2	1.5	1.5
(18)	A B C J K L N P Q R S T Y Z 0												
(19)	3 2				6					***	11	22.0	14.0
(20)	AAEA	E	11921		B	381		AC3	AC3		3	12.0	5.0
(21)	AAEA	E	11921		C	381		AC3	AC3		2	10.0	10.0
(22)	AAEA	E	11921		R	381		AC3	AC3		1	6.0	3.0
(23)										**	6	28.0	18.0
(24)	A B C J K L N P Q R S T Y Z 0												
(25)	3 2				1					***	6	28.0	18.0
(26)										****	24	56.0	38.0

Figure 5-25.-When Malfunction Was Discovered Report (MDR-13).

SCIR-3 MONTHLY EQUIPMENT DISCREPANCY AND UTILIZATION REPORT MAY 89

JCNORG - AF4 PUC - 000029 ...TOTAL... ....SHPOP.... TOTAL

	BUNO	Type Equipment Code	Not Mission Capable/Scheduled	Not Mission Capable/Unscheduled	Not Mission Capable Supply	Partial Mission Capable Maintenance	Partial Mission Capable Supply	Full Mission Capable Maintenance	Full Mission Capable Supply	Equipment IN Service Hours	Equipment OUT Service Hours	Inventory Indication	Meter or Utilization Base	Equipment Utilization	Total Flight Hours	Total Number Flights	Ship Operation Flight Hours	Ship Operation Number Flights	Total SCIR Hours
			.....NMC.....			....PMC....		....FMC....											
	BUNO	TEC	SCH	UNS	SUP	MNT	SUP	MNT	SUP	EIS	EOS	INV IND	MTR /UB	EQUIP UTL	FLT HRS	NR FLTS	FLT HRS	NR FLTS	SCIR HRS
(1)	157453	AAFF	117	174		9	18			744		A			6	4			1407
(2)	157587	AAFF	37	93	33	81	18			744		A			35	15	22	9	682
(3)	157593	AAFF		168	397	27	148			744		A			12	5	5	2	2877
(4)	158004	AAFF	2	632	10					744		A			8	4			1747
(5)	159657	AAFF	26	45	5	144	294			744		A			63	21	39	14	805
(6)	159969	AAFF	2	142	2	21				744		A			29	11	10	4	245
(7)	159978	AAFF	28	92		209	41	295		744		A							1055
		*	212	1346	447	491	519	295		5208					153	60	76	29	8818
(8)		**	212	1346	447	491	519	295		5208					153	60	76	29	8818

Figure 5-26.-Monthly Equipment Discrepancy and Utilization Report (SCIR-3).

SCIR-4 MONTHLY EQUIPMENT CAPABILITY REPORT MAY 89

ORG: AF4 TEC: AAFF

	Bureau/Serial Number	Full Mission Capable	Partial Mission Capable									Not Mission Capable						Equipment IN Service Hours	Equipment OUT Service Hours	Equipment Available Hours
		....FMC....	.....PERCENT OF MISSION CAPABILITY..... PMC.....									.....NMC.....								
	BU/SER	A	B	C	D	E	F	G	H	J	K	L	W	X	Y	Z		EIS	EOS	EAH
(1)	157453	57.3			3.6											39.1		744		744
(2)	157587	64.7									10.3	3.0				22.1		744		744
(3)	157593	.4			1.7						1.9	19.9				76.0		744		744
(4)	158004	13.3														86.7		744		744
(5)	157657	30.8				41.9					14.8	2.4				10.1		744		744
(6)	159969	77.6				.4					2.4					19.6		744		744
(7)	159978	10.3	39.7			3.2					29.4	1.1				16.2		744		744
(8)	AVG	36.3	5.7		.8	6.5					8.4	3.8				38.5				
(9)	FMC: HRS - 2193 % - 42.0				PMC: HRS - 1010 % - 19.5						NMC: HRS - 2005 % - 38.6					TOT		5208		5208

Figure 5-27.-Monthly Equipment Capability Report (SCIR-4).

(AWM) hours by reason codes, summarized for a given EOC code and associated work unit code during a reporting period (fig. 5-28). This report is prepared from VIDS/MAF documents that have a valid EOC code documented in the Repair Cycle or Maintenance/Supply Record.

MONTHLY EQUIPMENT MISSION CAPABILITY BUREAU/SERIAL SUMMARY REPORT (SCIR-5-2)

This report shows SCIR hours by mission category and awaiting maintenance (AWM) hours by reason codes, summarized by a given EOC code and associated work unit code by bureau/ serial number (fig. 5-29). This report is prepared from VIDS/MAF documents that have a valid EOC code documented in the Repair Cycle/ or Maintenance/Supply Record.

MONTHLY MISSION AND MAINTENANCE DATA DETAIL BY BUREAU/SERIAL REPORT (SCIR-5-3)

This report is designed to show mission capability and maintenance data for each VIDS/MAF submitted for a given EOC code and associated work unit code by bureau/serial number within type equipment code and job control number organization (fig. 5-30).

MONTHLY MAINTENANCE SUMMARY

After the analyst masters and develops his or her own analysis techniques and becomes familiar with all of the Maintenance Data System (MDS) reports and their individual uses, then it is time to arrange the data in a format so that all maintenance personnel can easily understand the data presented.

To be of practical use to management, summarized reports must be compiled, studied, and analyzed by all supervisory personnel in the maintenance activity. The most common format for presenting equipment maintenance and utilization data on a monthly basis is the monthly maintenance summary. The monthly maintenance summary provides a coordinated combination of

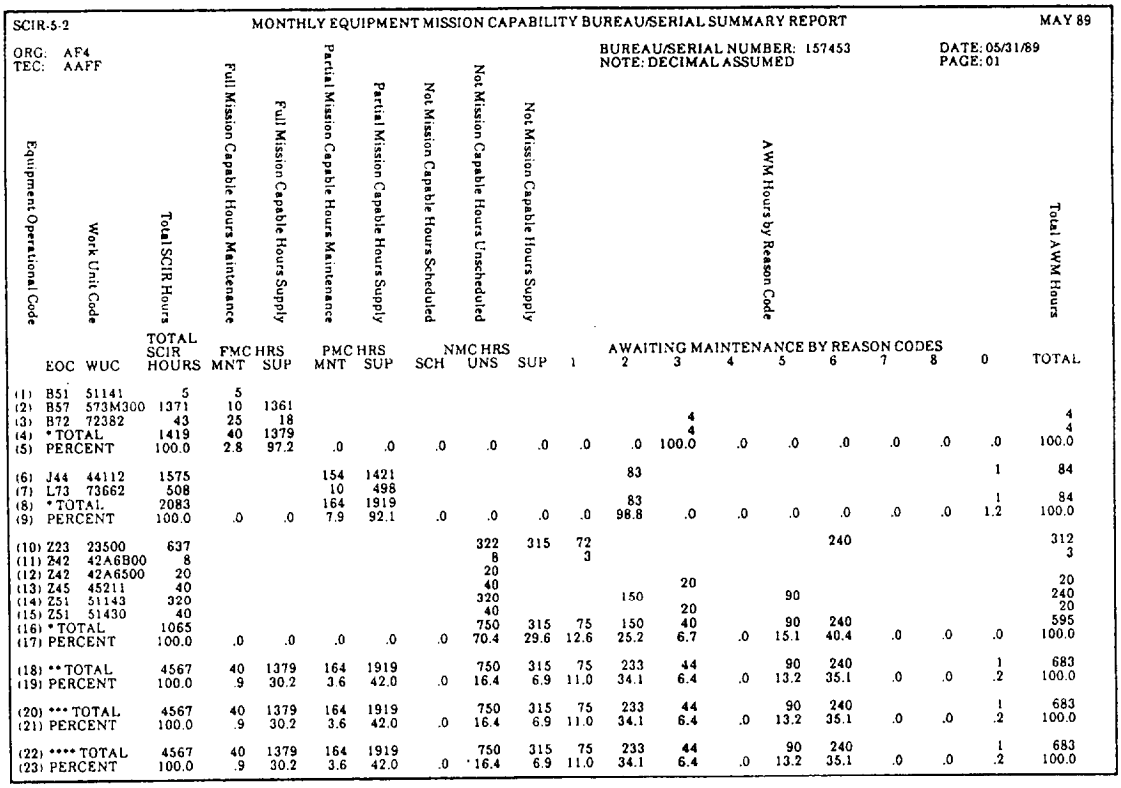
SCIR-5-1 MONTHLY EQUIPMENT MISSION CAPABILITY SUMMARY REPORT MAY 89

ORG: AF4
TEC: AAFF
NOTE: DECIMAL ASSUMED

DATE: 05/31/89
PAGE: 01

	Equipment Operational Code	Work Unit Code	Total SCIR Hours	Full Mission Capable Hours Maintenance	Full Mission Capable Hours Supply	Partial Mission Capable Hours Maintenance	Partial Mission Capable Hours Supply	Not Mission Capable Hours Scheduled	Not Mission Capable Hours Unscheduled	Not Mission Capable Hours Supply	AWM Hours by Reason Code								Total AWM Hours
	EOC	WUC	TOTAL SCIR HOURS	FMC HRS MNT	FMC HRS SUP	PMC HRS MNT	PMC HRS SUP	NMC HRS SCH	NMC HRS UNS	NMC HRS SUP	AWAITING MAINTENANCE BY REASON CODES 1	2	3	4	5	6	7	8	0	TOTAL
(1)	B51	51141	5	5																
(2)	B57	573M300	1371	10	1361															
(3)	B72	72382	43	25	18								4							4
(4)	* TOTAL		1419	40	1379								4							4
(5)	PERCENT		100.0	2.8	97.2	.0	.0	0	.0	.0	.0	.0	100.0	.0	.0	.0	.0	.0	.0	100.0
(6)	J44	44112	1575			154	1421					83							1	84
(7)	L73	73662	508			10	498													
(8)	* TOTAL		2083			164	1919					83							1	84
(9)	PERCENT		100.0	.0	.0	7.9	92.1	0	.0	.0	.0	98.8	.0	.0	.0	.0	.0	.0	1.2	100.0
(10)	Z23	23500	637						322	315	72					240				312
(11)	Z42	42A6B00	8						8		3									3
(12)	Z42	42A6500	20						20											
(13)	Z45	45211	40						40				20							20
(14)	Z51	51143	320						320			150			90					240
(15)	Z51	51430	40						40				20							20
(16)	* TOTAL		1065						750	315	75	150	40		90	240				595
(17)	PERCENT		100.0	.0	.0	.0	.0	0	70.4	29.6	12.6	25.2	6.7	.0	15.1	40.4	.0	.0	.0	100.0
(18)	** TOTAL		4567	40	1379	164	1919		750	315	75	233	44		90	240			1	683
(19)	PERCENT		100.0	.9	30.2	3.6	42.0	.0	16.4	6.9	11.0	34.1	6.4	.0	13.2	35.1	.0	.0	.2	100.0
(20)	*** TOTAL		4567	40	1379	164	1919		750	315	75	233	44		90	240			1	683
(21)	PERCENT		100.0	.9	30.2	3.6	42.0	.0	16.4	6.9	11.0	34.1	6.4	.0	13.2	35.1	.0	.0	.2	100.0

Figure 5-28.-Monthly Equipment Mission Capability Summary Report (SCIR-5-1).

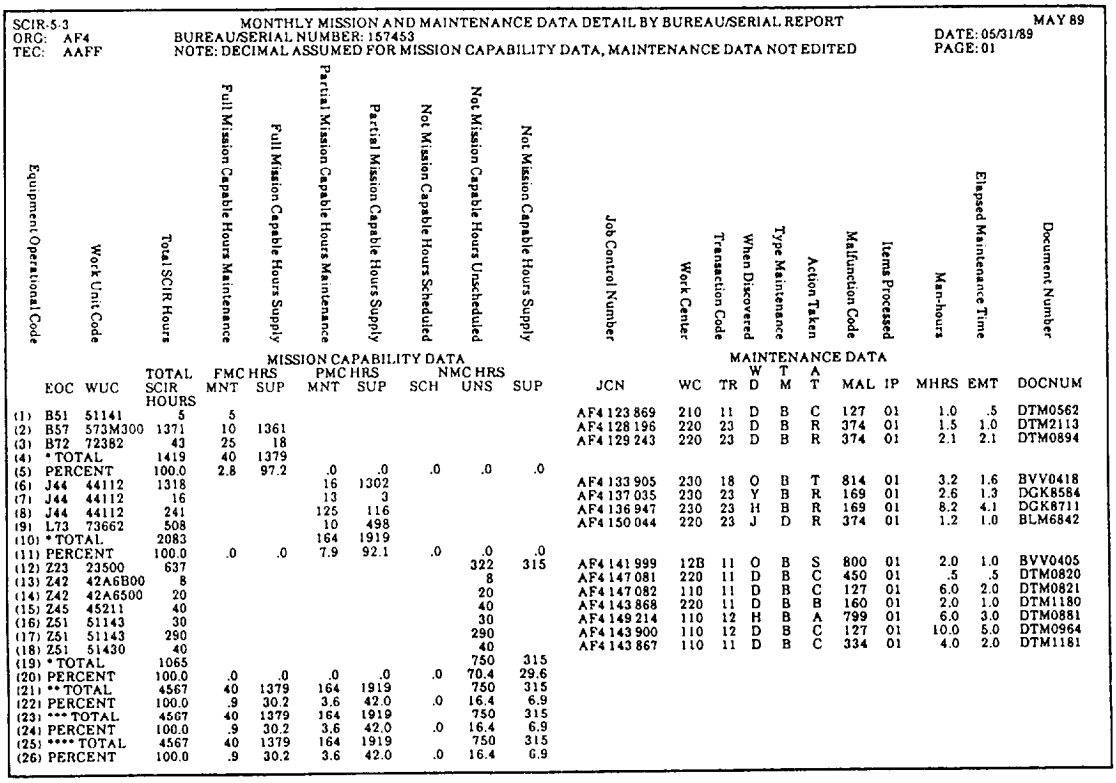


SCIR-5-2 MONTHLY EQUIPMENT MISSION CAPABILITY BUREAU/SERIAL SUMMARY REPORT MAY 89

ORG: AF4 BUREAU/SERIAL NUMBER: 157453 DATE: 05/31/89
TEC: AAFF NOTE: DECIMAL ASSUMED PAGE: 01

	Equipment Operational Code	Work Unit Code	Total SCIR Hours	Full Mission Capable Hours Maintenance	Full Mission Capable Hours Supply	Partial Mission Capable Hours Maintenance	Partial Mission Capable Hours Supply	Not Mission Capable Hours Scheduled	Not Mission Capable Hours Unscheduled	Not Mission Capable Hours Supply	AWM Hours by Reason Code								Total AWM Hours
	EOC	WUC	TOTAL SCIR HOURS	FMC HRS MNT	FMC HRS SUP	PMC HRS MNT	PMC HRS SUP	NMC HRS SCH	NMC HRS UNS	NMC HRS SUP	AWAITING MAINTENANCE BY REASON CODES 1	2	3	4	5	6	7	8	0	TOTAL
(1)	B51	51141	5	5																
(2)	B57	573M300	1371	10	1361								4							4
(3)	B72	72382	43	25	18								4							4
(4)	* TOTAL		1419	40	1379															
(5)	PERCENT		100.0	2.8	97.2	.0	.0	.0	.0	.0	.0	.0	100.0	.0	.0	.0	.0	.0	.0	100.0
(6)	J44	44112	1575			154	1421					83							1	84
(7)	L73	73662	508			10	498													
(8)	* TOTAL		2083			164	1919					83							1	84
(9)	PERCENT		100.0	.0	.0	7.9	92.1	.0	.0	.0	.0	98.8	.0	.0	.0	.0	.0	.0	1.2	100.0
(10)	Z23	23500	637						322	315	72					240				312
(11)	Z42	42A6B00	8						8		3									3
(12)	Z42	42A6500	20						20											
(13)	Z45	45211	40						40				20							20
(14)	Z51	51143	320						320			150			90					240
(15)	Z51	51430	40						40				20							20
(16)	* TOTAL		1065						750	315	75	150	40		90	240				595
(17)	PERCENT		100.0	.0	.0	.0	.0	.0	70.4	29.6	12.6	25.2	6.7	.0	15.1	40.4	.0	.0	.0	100.0
(18)	** TOTAL		4567	40	1379	164	1919		750	315	75	233	44		90	240			1	683
(19)	PERCENT		100.0	.9	30.2	3.6	42.0	.0	16.4	6.9	11.0	34.1	6.4	.0	13.2	35.1	.0	.0	.2	100.0
(20)	*** TOTAL		4567	40	1379	164	1919		750	315	75	233	44		90	240			1	683
(21)	PERCENT		100.0	.9	30.2	3.6	42.0	.0	16.4	6.9	11.0	34.1	6.4	.0	13.2	35.1	.0	.0	.2	100.0
(22)	**** TOTAL		4567	40	1379	164	1919		750	315	75	233	44		90	240			1	683
(23)	PERCENT		100.0	.9	30.2	3.6	42.0	.0	16.4	6.9	11.0	34.1	6.4	.0	13.2	35.1	.0	.0	.2	100.0

Figure 5-29.-Monthly Equipment Mission Capability Bureau/Serial Summary Report (SCIR-5-2).



SCIR-5-3 MONTHLY MISSION AND MAINTENANCE DATA DETAIL BY BUREAU/SERIAL REPORT MAY 89

ORG: AF4 BUREAU/SERIAL NUMBER: 157453 DATE: 05/31/89
TEC: AAFF NOTE: DECIMAL ASSUMED FOR MISSION CAPABILITY DATA, MAINTENANCE DATA NOT EDITED PAGE: 01

	Equipment Operational Code	Work Unit Code	Total SCIR Hours	Full Mission Capable Hours Maintenance	Full Mission Capable Hours Supply	Partial Mission Capable Hours Maintenance	Partial Mission Capable Hours Supply	Not Mission Capable Hours Scheduled	Not Mission Capable Hours Unscheduled	Not Mission Capable Hours Supply	Job Control Number	Work Center	Transaction Code	When Discovered	Type Maintenance	Action Taken	Malfunction Code	Items Processed	Man-hours	Elapsed Maintenance Time	Document Number
				MISSION CAPABILITY DATA										MAINTENANCE DATA							
	EOC	WUC	TOTAL SCIR HOURS	FMC HRS MNT	FMC HRS SUP	PMC HRS MNT	PMC HRS SUP	NMC HRS SCH	NMC HRS UNS	NMC HRS SUP	JCN	WC	TR	W D	T M	A T	MAL	IP	MHRS	EMT	DOCNUM
(1)	B51	51141	5	5							AF4 123 869	210	11	D	B	C	127	01	1.0	.5	DTM0562
(2)	B57	573M300	1371	10	1361						AF4 128 196	220	23	D	B	R	374	01	1.5	1.0	DTM2113
(3)	B72	72382	43	25	18						AF4 129 243	220	23	D	B	R	374	01	2.1	2.1	DTM0894
(4)	* TOTAL		1419	40	1379																
(5)	PERCENT		100.0	2.8	97.2	.0	.0	.0	.0	.0											
(6)	J44	44112	1318			16	1302				AF4 133 905	230	18	O	B	T	814	01	3.2	1.6	BVV0418
(7)	J44	44112	16			13	3				AF4 137 035	230	23	Y	B	R	169	01	2.6	1.3	DGK8584
(8)	J44	44112	241			125	116				AF4 136 947	230	23	H	B	R	169	01	8.2	4.1	DGK8711
(9)	L73	73662	508			10	498				AF4 150 044	220	23	J	D	R	374	01	1.2	1.0	BLM6842
(10)	* TOTAL		2083			164	1919														
(11)	PERCENT		100.0	.0	.0	7.9	92.1	.0	.0	.0											
(12)	Z23	23500	637						322	315	AF4 141 999	12B	11	O	B	S	800	01	2.0	1.0	BVV0405
(13)	Z42	42A6B00	8						8		AF4 147 081	220	11	D	B	C	450	01	.5	.5	DTM0820
(14)	Z42	42A6500	20						20		AF4 147 082	110	11	D	B	C	127	01	6.0	2.0	DTM0821
(15)	Z45	45211	40						40		AF4 143 868	220	11	D	B	B	160	01	2.0	1.0	DTM1180
(16)	Z51	51143	30						30		AF4 149 214	110	12	H	B	A	799	01	6.0	3.0	DTM0881
(17)	Z51	51143	290						290		AF4 143 900	110	12	D	B	C	127	01	10.0	5.0	DTM0964
(18)	Z51	51430	40						40		AF4 143 867	110	11	D	B	C	334	01	4.0	2.0	DTM1181
(19)	* TOTAL		1065						750	315											
(20)	PERCENT		100.0	.0	.0	.0	.0	.0	70.4	29.6											
(21)	** TOTAL		4567	40	1379	164	1919		750	315											
(22)	PERCENT		100.0	.9	30.2	3.6	42.0	.0	16.4	6.9											
(23)	*** TOTAL		4567	40	1379	164	1919		750	315											
(24)	PERCENT		100.0	.9	30.2	3.6	42.0	.0	16.4	6.9											
(25)	**** TOTAL		4567	40	1379	164	1919		750	315											
(26)	PERCENT		100.0	.9	30.2	3.6	42.0	.0	16.4	6.9											

Figure 5-30.-Monthly Mission and Maintenance Data Detail by Bureau/Serial Report (SCIR-5-3).

MDS reports to highlight specific problem areas and improve overall maintenance management. Trends may be detected and corrected before they reach crisis levels through analysis over a period of time.

The monthly maintenance summary contains various displays; for example, charts, graphs, and tables that are used to present the results of analysis. Several examples of the various charts, graphs, and tables that are used in the monthly maintenance summary are contained in the latest edition of OPNAVINST 4790.2.

CHAPTER REVIEW QUESTIONS

Q1. What are the maintenance personnel assigned to quality assurance/analysis known as?

Q2. What does NAMDRP stand for?

Q3. What report provides a standard system for reporting explosive incidents?

Q4. What report provides maintenance activities with a method for reporting deficiencies in new or newly reworked material?

Q5. What form do you use to submit a category II (CAT II) Technical Publication Deficiency Report (TPDR)?

Q6. An Aircraft Discrepancy Report (ADR) must be submitted not later than how many days after receipt of the aircraft?

Q7. What report should you submit if a technical publication deficiency is detected that if not corrected, could result in death or injury to personnel?

Q8. The data analyst must be a senior petty officer and formally trained in what?

Q9. What is the function of analysis?

Q10. What process involves the detailed study of all of the data?

Q11. What form is used to submit source documents to the data services facility (DSF)?

Q12. What action does the DSF take if a document is found to be illegible?

Q13. What method is used to correct data in the VIDS/MAF A-Z record?

Q14. What data is contained on part I of the VIDS/MAF copy 1 Daily Audit Report (DAR)?

Q15. What report provides the work center supervisor with statistical data pertaining to the work center?

Q16. What report can be used to identify part numbers that have a high awaiting parts (AWP) time?

Q17. What report indirectly reflects housekeeping conditions?

Q18. What report shows the amount of time and effort expended on maintenance for which there is no malfunction?

Q19. What report is designed to reflect equipment capability to perform its assigned mission/function during a reporting period?

Q20. What is the most common format for presenting equipment maintenance and utilization data on a monthly basis?